

Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

62.67

FEB 14 1924



1923

McCULLOUGH'S

Catalog of

BULBS, SEEDS, PLANTS,

Roses, Shrubbery, Trees, Etc.

FOR FALL PLANTING



WITH COMPLETE CULTURAL DIRECTIONS FOR BULBS

R. S. McCULLOUGH, President

GEO. H. PARVIN, Vice-President



Established 1838
Incorporated 1904

The J. M. McCullough's Sons Co.

SEEDSMEN and Importers of BULBS

316 WALNUT STREET 316
JUST BELOW FOURTH

Opposite Walnut Street Entrance Dixie Terminal Building

Long Distance Phone: Main 4598
P. O. Box 845

Cincinnati, Ohio



Established 1838
Incorporated 1904



Established 1838
Incorporated 1904

INSTRUCTIONS

Always Get Your Bulbs Early



Established 1838
Incorporated 1904

IT IS advisable to get your bulbs in the ground as early as possible after the first of October. Sooner will do no harm in cold localities. Although they can be planted as late as they can be got in the ground, yet those planted early give finer flowers, as it is necessary for bulbs to make some root growth in fall to give the best results. The general line of bulbs will be ready the second week in September. A few kinds (chiefly lilies) are not ready for shipment before November, as they are not matured enough to take up before that time. Therefore, please note that all general orders will be shipped as soon as received, and the "November Bulbs" will be forwarded as early in November as possible. Should you wish us to hold your general order until November bulbs are ready, please so state.

OUR PRICES INCLUDE POSTAGE on single bulbs and by the dozen, except where otherwise noted. Bulbs quoted by the hundred are not sent prepaid.

Order Early. It will greatly facilitate shipments if orders are sent early. We aim to send off all orders the day received.

Send the Money with the Order. Remit by Post Office Order, Registered Letter, Express Money Order, or Draft on Cincinnati or New York. United States Postage Stamps will be received for small amounts; be exceedingly careful about the least moisture getting on them when remitting, as they sometimes reach us so stuck together as to be almost worthless.

We do not send C. O. D. Everything being plainly priced, the return charges on money is an unnecessary expense.

Should you change your address, we will esteem it a favor if you will notify us, so that we can forward our Catalogs with regularity; if you receive two catalogs of the same kind, please hand one to some friend who is interested in horticulture.

Should an Error Occur, we desire to be promptly informed, and will take pleasure in making satisfactory corrections.

Write your name and address distinctly and in full; please use the order sheet and envelope inserted in this catalog.

Our Spring Catalog of Seeds, Bulbs, etc., for 1921 will be ready about January 1st, and will be sent free to all customers and applicants.

We, The J. M. McCullough's Sons Co., give no warranty, express or implied, as to description, quality, productiveness, or any other matter of any seeds, bulbs or plants we send out, and we will not be in any way responsible for the crop. If the purchaser does not accept the goods on these terms, they are at once to be returned.

Trade Marks Registered; McCullough's Seeds, XXXX, Buckeye, Suburban Lawn Grass, Central Park Lawn Grass.

PARCEL POST RATES

All parcels of seeds, bulbs and plants, up to and including 8 oz. at the rate of 1c for each 2 oz. regardless of distance; over 8 oz., at the Zone Rate. All merchandise other than seeds, bulbs and plants up to and including 4 oz. in weight can be sent at the rate of 1c an ounce regardless of distance. Over 4 oz. at the Zone Rate.

NOTE—When estimating postage on goods not included in our free delivery, bear in mind that while the packing on one pound may only weigh the fraction of a pound, it must be considered as a full pound when adding postage. On larger quantities add postage in proportion.

Limit of weight for delivery within local, first, second and third zones is 70 pounds; to all other zones, 50 pounds.

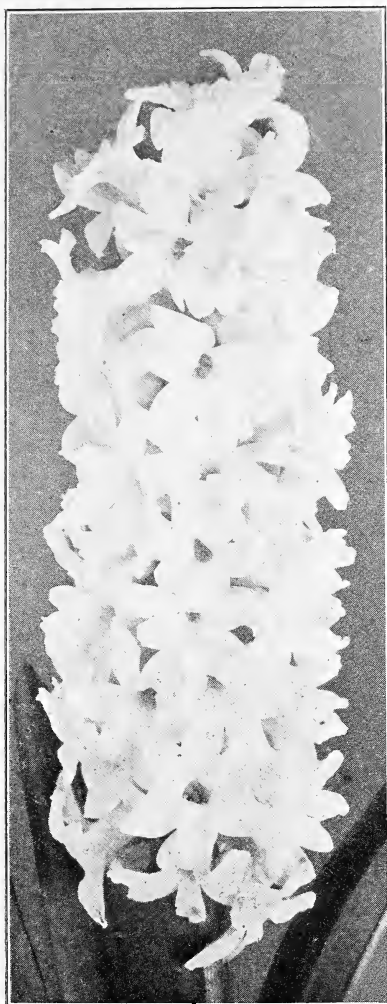
When larger quantities are wanted we can pack in two or more parcels if necessary, provided money is remitted to cover postage.

Zone	First Pound	Each Additional Pound
1 and 2—150 miles.....	5c	1c
3—150 to 300 miles.....	6c	2c
4—300 to 600 miles.....	7c	4c
5—600 to 1,000 miles.....	8c	6c
6—1,000 to 1,400 miles.....	9c	8c
7—1,400 to 1,800 miles.....	11c	10c
8—All over 1,800 miles.....	12c	12c

Poisons cannot be sent by mail. Liquids and goods packed in glass should be sent by Express.

INDEX

	Page		Page		Page
Acid Phosphate.....	36	Fountains.....	48	Lawn Lime.....	36
Bird Houses.....	42	Freesia.....	10	Lawn Grass Seed.....	15
Bird Seeds..... 3rd Page Cover		Fruit Trees.....	32-33	Leg Bands.....	46
Blackberries.....	34	Fruits, Small.....	34-35	Lilies.....	9-10-11
Books..... Send for list		Fungicides.....	37	Mastica.....	41
Bone Cutters.....	45	Glass Cutter.....	41	Mattock.....	41
Bone Meal.....	36	Glazing Points.....	41	Mats, Hotbed.....	41
Brooders.....	43-44	Gooseberries.....	34	Mushroom Spawn.....	12
Bulbs..... 1 to 12		Grape Hyacinth.....	10	Narcissus.....	7-8
Bulb Fibre.....	12	Grape Vines.....	35	Nitragin.....	19
Cane Stakes.....	41	Grass Seeds.....	16-17	Nitrate of Soda.....	36
Cattle Manure.....	36	Grass Mixtures.....	17	Oat Sprouters.....	45
Chionodoxa.....	9	Grass Ornamental.....	25	Ornamental Trees.....	29-30
Climbing Plants.....	31	Hedge Plants.....	25	Ornamental Shrubs.....	26 to 29
Clover Seeds.....	18-19	Horticultural Tools.....	41-42	Ponies.....	24
Coops.....	46	Humus.....	36	Perennial Plants.....	20 to 25
Crocus.....	9	Hyacinths.....	1-2-3	Phlox.....	24
Currants.....	34	Hyacinth Glasses.....	12	Plant Bed Cloth.....	41
Dewberries.....	34	Hydrated Lime.....	36	Plant Tubs.....	40
Edwards' Legume Bacteria.....	19	Incubators.....	43-44	Poppies.....	24
Eranthis Hyemalis.....	17	Insecticides.....	37	Putting Soil.....	37
Farm Seeds.....	10	Iris.....	10-22-23	Poultry Feeds..... 3rd Page Cover	
Feeders and Hoppers.....	47-48	Jonquils.....	9	Poultry Fencing.....	46
Fertilizers.....	36-37	Knives.....	41	Privet.....	25
Flower Pots.....	14	Labels.....	41	Pruners.....	41
Flower Seeds.....	12-13-14	Lawn Cleaner.....	41	Pumps, Spray.....	38-39
				Putty Bulbs.....	41
				Putty, Twemlow's.....	41
				Raffia.....	41
				Raspberries.....	34
				Raspberrut.....	46
				Roses.....	31
				Saws, Hotbed.....	42
				Saws.....	41
				Scale Destroyers.....	37
				Scilla.....	12
				Seed Sowers.....	42
				Shears, Pruning.....	41
				Sheep Manure.....	36
				Shrubs, Flowering.....	26 to 29
				Small Fruits.....	34-35
				Snowdrops.....	12
				Sprayers.....	38-39
				Sprinklers.....	42
				Strawberries.....	35
				Sulphate of Ammonia.....	36
				Thermometers.....	42
				Trees, Fruit.....	32-33
				Trees, Shade.....	30
				Tulips.....	4-5-6
				Watering Pots.....	42
				Wire Stands.....	42



Dutch Hyacinths

THE Hyacinth is so well known and esteemed that any description of its many good qualities is needless. The list now offered includes nearly every shade of red, white, blue, yellow, etc.

Culture of the Hyacinth

FOR PLANTING HYACINTHS IN OPEN GROUND, the preferable season is September to November, but they can be set out at any later time as long as the ground is open. The best compost for their culture is one-third sand, one-third well-rotted cow manure, and one-third good garden mould; or, where the soil is naturally light, well-rotted cow manure liberally intermixed is all sufficient. The beds composed of the above compost should be well dug to a depth of fourteen inches, and raised from two to four inches above the level of the walk. The bulbs should be planted about six inches deep, and from five to six inches apart. Care must be taken not to press the earth too firmly around and over the bulbs. After planting, rake the bed or border smooth, and after the ground has frozen tolerably hard in early winter, cover with a few inches of dry litter, leaves, evergreen boughs or coarse manure.

FOR THE CULTURE OF HYACINTHS IN POTS, prepare the above compost, adding, if possible, a quantity of leaf mould. The most favorable time for planting is September, October and November for a succession of bloom; use a four or five inch pot for a single bulb, and a seven inch for three bulbs. Set the bulbs down in the soil and cover them; do not press them in by force, for this packs the soil under them, and when the roots start they are apt to lift the bulb. After planting, water and set away in a dark place until the pots are well filled with roots. Keep the earth moist, and bring to the light as wanted to bloom. Being exposed to the light for the first time, they are, of course, very delicate, care should, therefore, be exercised not to place them in the direct rays of the sun for two or three days.

FOR CULTURE IN GLASSES, the bulbs should be so placed that only the base touches the water; then place them, for the first ten days, in a dark but cool closet or room, to promote the starting of the roots, after which expose them to the light and air as much as possible; **avoid placing them near gas-light**. The water should be changed as it becomes impure; draw the roots entirely out of the glasses, rinse off the fibres in clean water and wash the inside of the glass well. The water should never be allowed to freeze. When the flowers are well advanced, give them a shower of water every day.

Choice Named Single Hyacinths

(EXTRA SELECTED, FIRST OR TOP SIZE BULBS.)

IT IS supposed by many that the best Hyacinths are those which produce double flowers. This is by no means correct, there being many more of the single varieties producing fine, free and brilliant spikes of bloom, and they succeed better in glasses than the double.

PRICES PER DOZEN AND SINGLE BULB INCLUDE POSTAGE

We offer the following named varieties at the uniform price of 15c each; \$1.75 per dozen; \$12.00 per 100.

Single Red, Rose and Pink

ETNA, brilliant pink, large spike and flower, late flowering.
GARIBALDI, brilliant carmine, very early.
GENERAL DE WET, light pink, large spike, good flower.
GENERAL PELISSIER, deep crimson, fine truss, early.
GERTRUDE, deep rose, fine compact spike.
GIGANTEA, delicate pink, large bells.
LADY DORR, bright rose, large spike and flower, excellent for forcing or pot culture, large bulb.
LA VICTOIRE, brilliant dark pink, very large spike; one of the best.
MARCONI, light pink, large spike and flower; extra fine.
MARIE CATHERINA, deep red, large spike.
MORENO, waxy pink; large truss and bells; extra fine variety.
QUEEN OF PINKS, brilliant pink; large flower and spike; a great acquisition—one of the best.
ROBT. STEIGER, bright crimson, a fine compact spike.
ROI DES BELGES, bright scarlet, fine truss.

Single Pure and Tinted White

ALBERTINE, pure white, early, good forcing variety.
ARENTE ARENDSEN, pure white, large spike and flower, very early; splendid for forcing.
BLANCHEUR, pure white, large broad truss.
BRITISH QUEEN, pure white, large truss; very early.
CORREGIO, the large, fleshy bells are snow white, and form a perfect truss of great beauty and size; good forcer.
GENERAL VETTER, bluish white, very large spike; splendid early forcer.
GRANDE BLANCHE, bluish white, large spike and flower; early,

Single Pure and Tinted White —Continued

GRANDEUR A MERVEILLE, rosy-white, large truss.
LA GRANDESSE, pure white, with immense bells; one of the best in cultivation.
L'INNOCENCE, pure white, extra large truss.

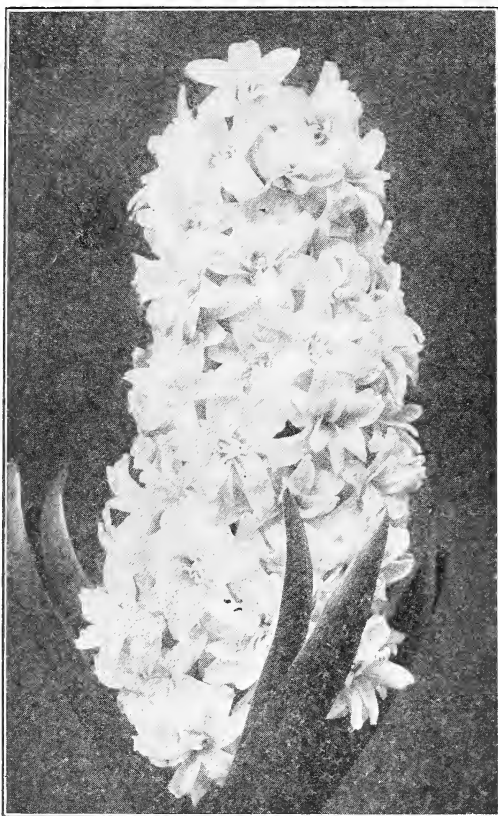
Single Blue, Lavender and Purple

CAPTAIN BOYTON, bright lavender blue, with silvery shading; handsome long spike.
ENCHANTRESS, delicate porcelain blue, large compact truss.
GRAND LILAS, silvery lilac, large compact truss.
GRAND MAITRE, deep porcelain blue, large truss.
KING OF BLUES, dark rich blue, splendid spike.
LA PEYROUSE, light blue, large bells.
MARIE, dark purple, very large spike.
PERLE BRILLIANTE, light blue, large spike and flowers; late flowering.
QUEEN OF BLUES, beautiful azure blue, large bells and handsome truss; late.
SCHOTEL, light blue, long perfect truss; early; good forcer.

Single Yellow

CITY OF HAARLEM, golden yellow, large well formed truss, extra fine.
KING OF YELLOWS, pure yellow, large bell and spike.
YELLOW HAMMER, golden yellow, fine large spike; one of the best.

The above named Hyacinths, 15c each; \$1.75 per dozen; \$12.00 per 100.



Select First-Size Named Double Hyacinths

WHILE double-flowering Hyacinths do not, as a rule, produce as fine spikes as the single sorts offered on page 1, yet they are exceedingly handsome and deserve extensive cultivation. The varieties listed below are those which we have found by actual tests to be the most satisfactory.

We offer the following named varieties at the uniform price of.....15c each; \$1.75 per dozen; \$12.00 per 100.

Double Red and Rose

CHESTNUT FLOWER, bright rose, large flower.
GROOTVORST, pink, large truss and bells.
NOBLE PAR MERITE, rose, large bells, splendid truss.
PRESIDENT ROOSEVELT, bright rose, fine spike.
PRINCE OF ORANGE, bluish rose, fine spike, semi-double.

Double White

BOUQUET ROYAL, pure white, fine spike.
EDISON, bluish white, fine spike, early.
LA TOUR d'AUVERGNE, pure white, very early.
LA VIRGINITE, bluish white, dwarf, large bells.
QUEEN OF WHITES, pure white, large truss, fine flower.

Double Blue

BLOKSBERG, porcelain striped, large truss.
CROWN PRINCE OF SWEDEN, violet blue.
GARRICK, lilac blue, with bright blue stripe.
GENERAL ANTINK, porcelain blue, dark center, good truss.

Double Yellow

GOETHE, clear, pale yellow, large bells, fine truss.
JAUNE SUPREME, deep yellow, tinted with salmon.
SIR ROWLAND HILL, pure yellow, large spike.
SUNFLOWER, yellow, tinted salmon.

Above named Hyacinths, 15c each; \$1.75 per dozen; \$12.00 per 100.
 Prices Per Dozen and Single Bulb Include Postage.

Select Second-Size Named Single Hyacinths

THESE are smaller than our Extra Selected first or top size bulbs offered on page 1, but are fine flowering stock, and admirably adapted for pot culture and high-grade bedding where distinct shades of color are desired.

We can furnish them in the following selected varieties at the uniform price of.....10c each; \$1.10 per dozen; \$8.00 per 100

Single Red, Rose and Pink

CARDINAL WISEMAN, charming bright rose-pink, large spike.
GENERAL PELISSIER, deep crimson, fine truss, early.
GERTRUDE, deep rose, fine compact spike.
GIGANTEA, delicate pink, large bells.
MORENO, waxy pink, large truss and bells, extra fine variety.
QUEEN OF PINKS, brilliant pink, large flower and spike.
ROBT. STEIGER, bright crimson, a fine compact spike.
ROI DES BELGES, bright scarlet, fine truss.

Single Pure and Tinted White

ALBERTINE, pure white, early, good forcing variety.
ARENTE ARENDSEN, pure white, large spike, good forcer.
CORREGIO, pure white, large truss, good forcer.
GRANDE BLANCHE, bluish white, large spike and flowers; early.
GRANDEUR A MERVEILLE, rosy white, large truss.
LA GRANDESSE, pure white, with immense bells, one of the best in cultivation.
L'INNOCENCE, pure white, extra large truss.

Single Blue, Lavender and Purple

ENCHANTRESS, porcelain blue, large compact truss.
GRAND MAITRE, deep porcelain blue, large truss.
KING OF BLUES, dark, rich blue, splendid spike.
LA PEYROUSE, light blue, large bells.
MARIE, dark purple, very large spike.
QUEEN OF BLUES, beautiful azure blue, large bells and handsome truss; late.
REGULUS, light blue, good forcer and bedder.

Single Yellow

KING OF YELLOWS, pure yellow, large bell and spike.
YELLOW HAMMER, golden yellow, large spike.

The above named Hyacinths, 10c each; \$1.10 per dozen; \$8.00 per 100.

Prices per dozen and single bulb include postage.



Choice Un-Named Hyacinths

For Bedding and Forcing, in Separate Colors and Mixed Shades

These are made up of varieties selected for beds and borders, or for forcing for cut flowers, and are of such superior quality as to be entirely satisfactory to florists who use large quantities of them.

Prices Per Dozen and Single Bulb Include Postage.

We offer the following un-named varieties at the uniform price of.....8c each; 80c per dozen; \$6.00 per 100

Single Varieties

Red, mixed shades.
Rose.
Pure White.
White, tinted.

Dark Blue and Purple.
Light Blue.
Yellow.
MIXED, all colors.

Double Varieties

Red, mixed shades.
Rose.
Pure White.
White, tinted

Dark Blue and Purple.
Light Blue.
Yellow.
MIXED, all colors.

Hyacinths--Miniature or Dutch Roman

These may be planted close together in pots or boxes, also in beds in the open ground with charming effect. We can furnish named varieties in the following colors: Dark Red, Rose and Pink, Dark Blue, Light Blue, Pure White, and All Colors Mixed.
6c each; 60c per dozen; \$4.00 per 100

Roman Hyacinths--Exclusively for Forcing

THESE are extensively used by florists for forcing, which may be done at a temperature of 60 degrees. They flower two to three weeks in advance of the Holland Hyacinths. The flowers are very fragrant, and each bulb will throw up from three to four spikes. For forcing, three or four bulbs are generally planted in a suitable pot in good soil as recommended for other varieties. The pots must be kept in a cool and dark place until filled with roots, when the flower spikes can be rapidly developed by exposure to light and moderate heat. We offer Roman Hyacinths in three colors this season:

White Roman Hyacinths.....12c each; \$1.25 per dozen; \$ 9.00 per 100
Blue Roman Hyacinths.....15c each; 1.50 per dozen; 10.00 per 100
Rose Roman Hyacinths.....12c each; 1.25 per dozen; 9.00 per 100

Round Bed of Named Single Hyacinths Second-Size



THIS illustration represents a bed 15 feet in circumference, or five feet across, composed of 5 circular rows, requiring a total of 100 bulbs, planted 6 inches apart, as follows:

Combination No. 1. 100 Hyacinths—(Select Second Size Named.) Center row contains 9 Red Hyacinths; second row contains 14 White Hyacinths; third row contains 20 Blue Hyacinths; fourth row contains 25 Pink Hyacinths; fifth row contains 32 Dark Blue Hyacinths.

Price \$8.00, not prepaid.

Combination No. 2. Consists of 100 Un-named Hyacinths, mixed shades that will produce a charming effect.

Price \$6.00, not prepaid.

Square Bed of Single Hyacinths

This illustration represents a bed 6 feet square, requiring a total of 169 bulbs planted 6 inches apart.

PINK AND BLUE COMBINATION requires 85 Pink and 84 Blue Hyacinths.

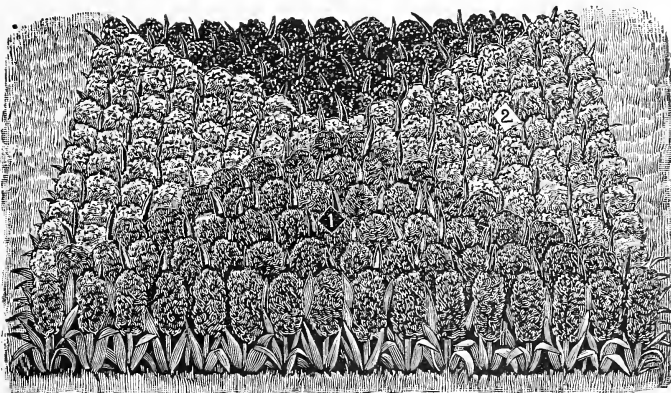
CRIMSON AND WHITE COMBINATION requires 85 Crimson and 84 White Hyacinths.

Price for either Combination—Our Select Second Size, Named Hyacinths, \$13.00, not prepaid.

Suburban Combination

Consists of 169 Choice Un-named Hyacinths, mixed shades.

Price, \$9.00, not prepaid.



McCULLOUGH'S COLLECTIONS OF NAMED HYACINTHS

Special Selection for Growing in Water.

This selection is made up of sorts which are especially adapted for the purpose. For cultural notes see page 1.

12 distinct named single varieties; our selection.....\$1.50

Special Selection for Growing in Pots.

A selection of distinct sorts best adapted for the purpose. For cultural notes see page 1.

12 distinct named double varieties; our selection.....\$1.50

Prices per dozen and single bulb include postage.

Tulips

TULIPS are one of the most ornamental flowers grown; will thrive in any rich soil or situation if cultivated the same as the Hyacinth. Their brilliant colors impart a rich and beautiful appearance to the lawn in early spring. They can be grown in the house in pots or baskets, and will force well with Hyacinths under the same treatment. For outdoor planting October and November are the most

favorable months. Have the ground well drained; plant from three to four inches deep and about six inches apart.

The letters, a, b, c, following the varieties, indicate their earliness of bloom; the A's flower together, and are the earliest; B next, etc. The figures indicate the height attained in inches, to aid in arranging flower beds.

Prices Per Dozen and Single Bulb Include Postage

Single Early Tulips

ARTUS, b7, scarlet, fine bold flower, good for forcing or bedding.

6c each; 50c per dozen; \$3.50 per 100
BELLE ALLIANCE, b7, brilliant scarlet, large flower, sweet scented; fine for bedding and forcing.

6c each; 60c per dozen; \$4.00 per 100
CHRYSOLOGA, b9, pure yellow, large and handsome flower; finest yellow bedder.

6c each; 50c per dozen; \$3.50 per 100

Each	Per Doz.	Per 100
\$0 .06	\$0 .53	\$3.75
.06	.50	3.50
.06	.55	3.75
.06	.55	3.75
.06	.55	3.75
.06	.65	4.50
.06	.50	3.50
.06	.55	3.75
.05	.45	3.00
.06	.50	3.50
.06	.50	3.50
.06	.65	4.50
.06	.50	3.50
.06	.55	3.75
.06	.60	4.00
.08	.85	6.00
.06	.55	3.75
.06	.50	3.50
.06	.50	3.50
.06	.55	3.75
.06	.50	3.50
.05	.40	2.75
.04	.35	2.25

Late May Flowering Single Tulips—Continued

INGLESCOMBE YELLOW. Large globular flower, long strong stem, good for borders and cutting. May be called the Yellow Darwin Tulip on account of its Darwin Type.

5c each; 50c per dozen; \$3.50 per 100

ISABELLA (Blushing Bride, Shandon Bells). (18 inches). Large, long, handsome flower, silvery white, suffused soft carmine-rose towards the edge; center creamy yellow and green.

5c each; 50c per dozen; \$3.50 per 100

LA CANDEUR (Parisian White). (15 inches). Pure white changing to silvery pink; large egg-shaped flowers.

5c each; 50c per dozen; \$3.50 per 100

LA MERVEILLE. (18 inches). A magnificent variety with very large, sweet scented flowers; color, salmon-rose overlaid with orange-red, very effective in beds and borders.

5c each; 50c per dozen; \$3.50 per 100

PARISIAN YELLOW. (28 inches). A beautiful, large, pure yellow of exquisite shade and shape; special value for cutting.

5c each; 50c per dozen; \$3.50 per 100

PICOTEE (Maiden's Blush). (24 inches). White, faintly edged with pink, which suffuses the entire flower as it ages; a beautiful cut flower.

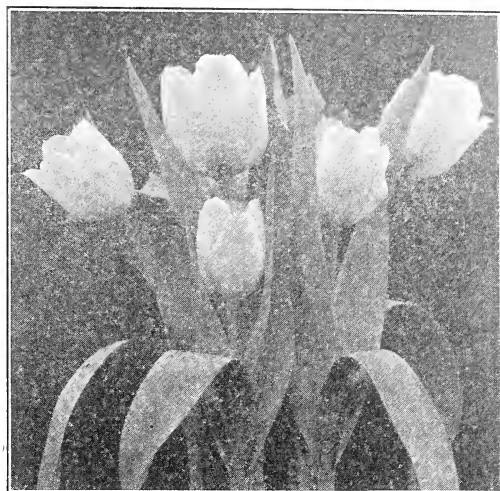
5c each; 50c per dozen; \$3.50 per 100

SWEET NANCY. A very large, white egg-shaped flower, edged and suffused with rose.

5c each; 50c per dozen; \$3.50 per 100

CHOICEST MIXED. A splendid mixture of all colors, including sweet scented varieties.

5c each; 45c per dozen; \$3.00 per 100



May Flowering Tulips

Darwin Tulips (May Flowering)



Darwin Tulips

THE Darwin are late May-flowering garden Tulips, producing very large bowl-formed flowers of symmetrical shape, on tall, strong stems, 2 to 3 feet high, and are effective grown in groups, in the shrubbery or herbaceous border. They far surpass in color and brilliancy anything before known in Tulips. They include almost every conceivable color and shade.

ASA GRAY. Dark carmine, large, finely formed flower.

6c each; 50c per dozen; \$3.50 per 100

BARONNE DE LA TONNAYE. (26 inches). Bright pink margined blush—base white, tinged blue. A long and beautiful flower.

6c each; 50c per dozen; \$3.50 per 100

BARTIGON. Fiery crimson with a pure white base—good forcer.

6c each; 65c per dozen; \$4.50 per 100

CLARA BUTT. A large flower of remarkable beauty; color soft salmon pink, shaded rose.

6c each; 50c per dozen; \$3.50 per 100

DREAM. Beautiful delicate lilac—large globular flower.

6c each; 65c per dozen; \$4.50 per 100

EUROPE (Salmon King). Glowing salmon scarlet, shaded rose, large distinct white base; one of the showiest bedders.

6c each; 65c per dozen; \$4.50 per 100

FARNCOMBE SANDERS. Immense flower of the most brilliant scarlet; one of the best and showiest.

6c each; 65c per dozen; \$4.50 per 100

GLOW. Brilliant, glowing vermilion; blue-black base, zoned white.

6c each; 60c per dozen; \$4.00 per 100

GRETCHEN. (Margaret). A lovely large flower of globular form; outside soft blush; inside blush rose.

6c each; 50c per dozen; \$3.50 per 100

MADAME KRELAGE. Soft lilac-rose, with a broad margin of blush pink; large flower on a very tall stem; good for forcing.

6c each; 65c per dozen; \$4.50 per 100

PAINTED LADY. Milk white, flushed heliotrope—a good bedding and forcing variety.

6c each; 50c per dozen; \$3.50 per 100

PRIDE OF HAARLEM. Magnificently formed flower of immense size; color brilliant, deep salmon-rose, shaded with scarlet; electric blue base.

6c each; 50c per dozen; \$3.50 per 100

REV. EWBANK. Lilac mauve, shading to silvery heliotrope at edge, very beautiful and distinct color; good forcer.

6c each; 50c per dozen; \$3.50 per 100

THE SULTAN. Rich, glossy black maroon; one of the best dark varieties.

6c each; 50c per dozen; \$3.50 per 100

WHITE QUEEN. A large globular flower of pure white, faintly flushed with delicate blush.

6c each; 60c per dozen; \$4.00 per 100

FINEST MIXED. Great variety of all colors and shades.

5c each; 45c per dozen; \$3.00 per 100

Parrot or Dragon Tulips

VERY large flowers of singular and picturesque forms and brilliant colors; very beautiful and interesting. The petals are curiously fringed or cut. They form showy flower beds or borders, are of endless variety of form and color, stand a long time when cut, and should be grown in every flower garden in quantity.

CONSTANTINOPLE. Large red flowers, tipped orange.

6c each; 55c per dozen; \$3.75 per 100

CRAMOISIE BRILLIANT. Deep crimson, with large, black, star-shaped center, extra fine.

6c each; 55c per dozen; \$3.75 per 100

LUTEA MAJOR. Large bright yellow, feathered with red and green.

6c each; 55c per dozen; \$3.75 per 100

PERFECTA. Striped yellow and scarlet.

6c each; 55c per dozen; \$3.75 per 100

FINEST MIXED COLORS.

5c each; 45c per dozen; \$3.00 per 100

Breeder Tulips

BREEDERS, formerly listed among the Cottage Tulips, really form a distinct class by themselves. These unbroken forms of the old Cottage Tulips are a most interesting class of Tulips.

They have become very popular lately on account of their refined, peculiar colors and vigorous growth. The enormous flowers carried on strong stems are very effective and especially suitable for garden decoration.

APRICOT. Bronzy buff, shaded orange, large peculiar shaped flower. 6c each; 80c per dozen; \$5.50 per 100

BRONZE QUEEN. (Clio). Delicate shade of brown, inside tinted golden bronze, beautiful tall stemmed flower of great substance; good forcer. 6c each; 80c per dozen; \$5.50 per 100

CARDINAL MANNING. (Goliath). Dark wine red, flushed rosy bronze, very peculiar color, large flower. 6c each; 80c per dozen; \$5.50 per 100

DOM PEDRO. A beautiful shade of coffee brown, shaded maroon, distinct attractive flower. 8c each; 85c per dozen; \$6.00 per 100

GODET PARFAIT. Bright violet, a very remarkable, beautiful color, large substantial flower. 10c each; \$1.00 per dozen; \$7.00 per 100

KLOPSTOCK. Fine lilac, immense flower. 15c each; \$1.30 per dozen; \$10.00 per 100

LA SINGULIERE. (Lord Curzon). Silvery white, dark crimson, margined, very large. 8c each; 80c per dozen; \$5.50 per 100

LOUIS XIV. Rich dark purple, shaded steel blue, heavily flushed bronze, edged golden brown, enormous size and stately bearing. 30c each; \$3.00 per dozen; \$20.00 per 100

MARIE LOUISE. Rose, flushed orange-salmon, a pleasing combination of colors, very attractive. 8c each; 85c per dozen; \$6.00 per 100

PANORAMA. Deep orange-red, shaded mahogany, large globular flower; good forcer. 8c each; 85c per dozen; \$6.00 per 100

PRINCE OF ORANGE. (Orange Beauty). Orange scarlet with paler edge; large, beautiful flower. 8c each; 80c per dozen; \$5.50 per 100

SALOMON. Lilac shaded silvery white, white base, a magnificent tulip. 20c each; \$2.00 per dozen; \$14.00 per 100

TURENNE. (Mac Mahon). Purplish brown with soft yellow edge, very large and early. 8c each; 85c per dozen; \$6.00 per 100

VELVET KING. (Dreadnaught). Velvety black, enormous flower on strong stem, very showy. 15c each; \$1.50 per dozen; \$10.00 per 100

YELLOW PERFECTION. Light bronze-yellow, edged golden yellow, very handsome flower. 6c each; 65c per dozen; \$4.50 per 100

FINEST MIXED. Great variety of colors and shades. 6c each; 65c per dozen; \$4.50 per 100.

Double Tulips

THIS class of Tulips is one of the most valuable. The earlier varieties are admirably adapted for pot culture and form a pleasing contrast to the Single Tulips in the greenhouse or conservatory. When planted in the open border they are very showy, and a succession of bloom may be had by a judicious selection from the earlier and later varieties. The Rex Rubrorum and La Candeur form a dense mass of bloom when grown in beds and the flowers remain in perfection of bloom longer than those of the single varieties.

FOR CULTURAL DIRECTIONS, ETC., SEE TULIPS, PAGE 4.



Double Tulips

BOULE DE NEIGE, b8, pure white large flower; extra fine. 6c each; 65c per dozen; \$4.50 per 100

COURONNE D'OR, b8, golden yellow flushed orange, large handsome flower; excellent for growing in pots or beds. 6c each; 65c per dozen; \$4.50 per 100

DUKE OF YORK, b8, carmine edged white; good for bedding and late forcing. 6c each; 50c per dozen; \$3.50 per 100

GLORIA SOLIS, a7, deep crimson with broad golden margin; very large. 6c each; 55c per dozen; \$3.75 per 100

IMPERATOR RUBRORUM, a9, rich crimson-scarlet; extra fine for forcing. 6c each; 65c per dozen; \$4.50 per 100

LA CANDEUR, b8, pure white extensively grown for bedding. 6c each; 60c per dozen; \$4.00 per 100

MURILLO, b8, blush-white shaded rose, large flowers; fine for forcing and bedding. 5c each; 45c per dozen; \$3.00 per 100

RUBRA MAXIMA, a9, dark crimson-scarlet; splendid early forcer and good bedder. 5c each; 55c per dozen; \$3.75 per 100

SALVATOR ROSA, a8, deep rose flamed with blush; a fine large double flower suitable for early forcing or bedding. 7c each; 70c per dozen; \$5.00 per 100

SCHOONOORD, b10, the finest double white; a sport from Murillo. 6c each; 65c per dozen; \$4.50 per 100

TEA ROSE, b10, saffron-yellow changing to rosy apricot; good forcer for growing in pots and pans. 6c each; 50c per dozen; \$3.50 per 100

TOURNESOL, a7, scarlet margined yellow; one of the best for forcing. 6c each; 65c per dozen; \$4.50 per 100

SEPARATE COLORS, Pink, Red, Striped Red and Yellow, White and Yellow. 5c each; 40c per dozen; \$2.75 per 100

FINE MIXED including all colors and shades. 5c each; 40c per dozen; \$2.50 per 100

Home Collections of Double Tulips

Our "Home Collection No. 1" consists of fifty double-flowering Tulips carefully selected from named varieties, and will produce handsome large double flowers. Price, \$1.50; not prepaid.

"Home Collection No. 2" consists of twenty-five double and twenty-five single-flowering Tulips selected from named varieties. Price, \$1.50; not prepaid.

MCCULLOUGH'S "NORWOOD" collection of **DOUBLE TULIPS** consists of 200 superfine, mixed double Tulips. Price, \$5.00; not prepaid.

Prices Per Dozen and Single Bulb Include Postage.

If you want Flowers in your House this winter or in your Garden next spring, you must plant Bulbs this fall.

Narcissus or Daffodils

A BEAUTIFUL class of early blooming flowers, both for outdoor blooming and for use as cut flowers in the house. Their delicious fragrance, easy culture and thriftiness entitles them to the greatest popularity.

The double and single sorts are perfectly hardy and need not be disturbed oftener than once in three or four years, and not then unless they have become too much crowded by offsets.

Plant in the fall in good garden soil, about three or four inches deep and two to six inches apart.

The Polyanthus varieties for flowering in pots in the house are very satisfactory. They bloom about the first of February in dense clusters, two or three flower stalks to each bulb, while the earliest of all, the Paper White, will come into bloom as early as December.

A good, natural temperature suits them best. Pot in the fall, let them root for two or three months in the dark, then remove to the conservatory or living room, and water as often as the soil requires moisture.

Single Narcissus

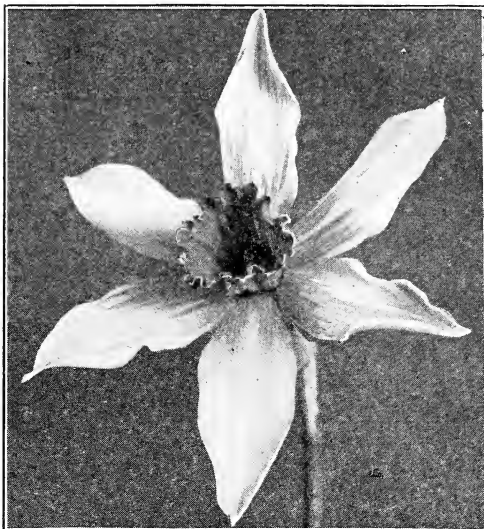
BARRI CONSPICUA. Large, broad yellow perianth; broad, short crown edged with scarlet; a robust, strong grower and free bloomer; should be grown in quantity for cutting, as it lasts longer than most sorts. 6c each; 65c per dozen; \$4.50 per 100

BICOLOR EMPRESS. Perianth white, trumpet rich yellow, serrated at edges; a magnificent large variety, bold, erect and of rare beauty for cutting. 7c each; 70c per dozen; \$5.00 per 100

BICOLOR GRANDIS. Flowers large with broad white perianth, the petals of which are wide and over-lapping; trumpet yellow, beautifully imbricated; a flower of great substance and fine for cutting; late flowering and valuable for succession. 7c each; 70c per dozen; \$5.00 per 100.

BICOLOR VICTORIA. Perianth creamy white, trumpet rich yellow, delicately perfumed; a strong grower with massive flowers which stand boldly erect. 7c each; 70c per dozen; \$5.00 per 100

EMPEROR. Perianth deep primrose-yellow, trumpet large, rich golden yellow; one of the finest Daffodils in cultivation; should be in every collection; a magnificent flower, much prized for cutting. 7c each; 70c per dozen; \$5.00 per 100



Narcissus Barri Conspicua

FIGARO. Perianth lemon yellow, cup yellow shaded with orange; a large and well-formed flower. 6c each; 65c per dozen; \$4.50 per 100

GOLDEN SPUR. Perianth deep yellow, trumpet golden yellow; a charming, highly perfumed flower, flowering early and freely. 7c each; 70c per dozen; \$5.00 per 100

MRS. LANGTRY. Pure white perianth, broad and overlapping; cup pale primrose changing to white with age; free flowering variety. 6c each; 55c per dozen; \$3.75 per 100

POETICUS. (Pheasant's Eye or Poet's). Flowers pure white with distinct red crown; sweet scented. 4c each; 35c per dozen; \$2.50 per 100

POETICUS KING EDWARD. A magnificent, large flowering early variety with a broad, round white flower with yellow cup edged deep red. 7c each; 70c per dozen; \$5.00 per 100

POETICUS ORNATUS. Large, pure white flowers, saffron cup, tinted with rosy scarlet; very early. 4c each; 35c per dozen; \$2.50 per 100

PRINCEPS MAXIMUS. Large flowers with light yellow perianth and deep yellow trumpet. 7c each; 70c per dozen; \$5.00 per 100

SIR WATKIN. Perianth sulphur yellow, cup slightly deeper in color and tinged with orange; flowers very large and free blooming. 7c each; 70c per dozen; \$5.00 per 100

STELLA. Perianth white and slightly twisted, yellow crown; flowers large, free blooming and one of the best for naturalizing. 6c each; 55c per dozen; \$3.75 per 100

TRUMPET MAJOR. Flowers large and of uniform deep golden yellow; comes into bloom early and is excellent for forcing, bedding or naturalizing. 6c each; 60c per dozen; \$4.00 per 100

VON SION SINGLE. Large flowers of rich yellow color; an excellent sort for forcing, bedding or naturalizing. 6c each; 60c per dozen; \$4.00 per 100

Prices per dozen and single bulb include postage.

Double Narcissus

ALBA PLENA ODORATA. The double Poeticus; flowers pure white, large and very fragrant, one of the finest for all purposes. 6c each; 65c per dozen; \$4.50 per 100

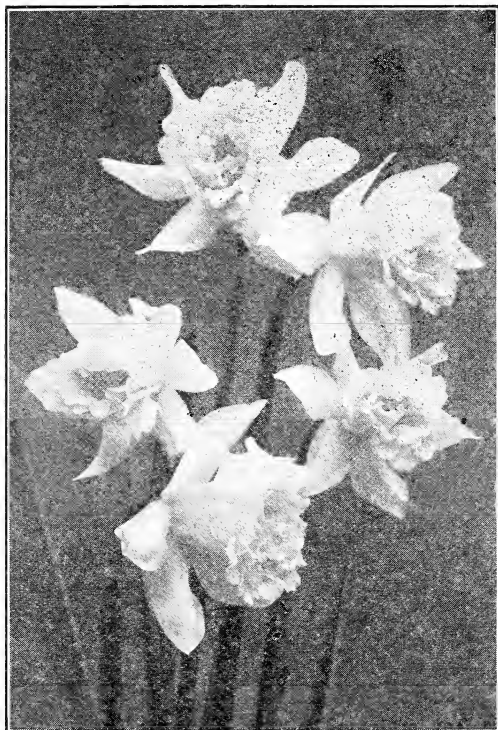
INCOMPARABLE. Pale yellow and orange mixed, full double flower, large, varying somewhat in shade like the single variety, from pale citron yellow to deep orange. 7c each; 70c per dozen; \$5.00 per 100

ORANGE PHOENIX. Large double white, with orange segments in the center. 7c each; 70c per dozen; \$5.00 per 100

SILVER PHOENIX. Largest of the Double Narcissus; pale creamy white with sulphur, delicate fragrance; fine for cutting or for decorating purposes. 7c each; 70c per dozen; \$5.00 per 100

VON SION. The famous "Old Double Yellow Daffodil," rich, golden yellow perianth and trumpet; one of the best forcing sorts. 6c each; 60c per dozen; \$4.00 per 100

VON SION. SELECTED EXTRA LARGE. True Northern grown Dutch Bulbs. 7c each; 75c per dozen; \$5.50 per 100



Narcissus Double Von Sion

Prices Per Dozen and Single Bulb Include Postage.

Narcissus Poetae Hybrids

THESE new hardy cluster-flowered hybrids between Poeticus and Polyanthus are healthy, strong and tall growers, some of the varieties attaining a height of 2 feet. The flowers are more like Poeticus in character, but are borne in clusters like the Polyanthus. Planted in permanent quarters they form large, luxuriant clumps.

ALSACE. Very early flowering, color pure white with yellow cup, faintly edged red on opening.

7c each; 75c per dozen; \$5.50 per 100

ELVIRA. Pure white with yellow eye, large flower of good substance, 3 to 4 flowers on a stem; strong grower.

7c each; 75c per dozen; \$5.50 per 100

IDEAL. Pure white with dark orange eye, large truss of 6 to 7 flowers; beautiful color.

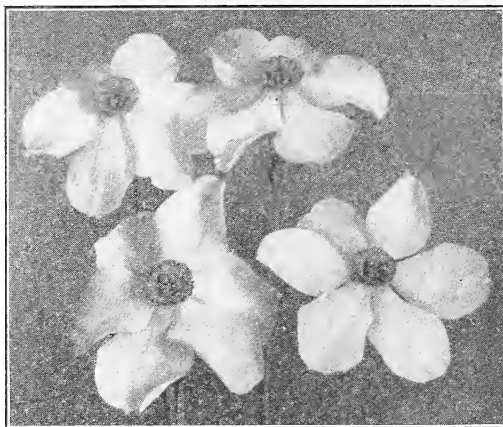
10c each; \$1.00 per dozen; \$6.50 per 100

IRENE. Sulphur yellow changing to light yellow, orange eye; large broad truss bearing 8 to 9 flowers.

10c each; \$1.00 per dozen; \$6.50 per 100

TRIUMPH. Perianth white, with yellow eye, the largest flower of this section; 3 to 4 flowers on a stem.

10c each; \$1.00 per dozen; \$6.50 per 100



Narcissus Poeticus

Polyanthus Narcissus

BEAUTIFUL, free flowering, deliciously sweet scented flowers of the easiest culture; suitable for forcing or for growing in water in the same way as the Chinese Sacred Lilies. Their tall spikes of bloom bear from 6 to 12 flowers each. If planted in open borders, they must be well protected by a covering of litter.

PAPER WHITE GRANDIFLORA. An improved large flowering form of the Paper White, possessing all the good qualities of that popular and easily-grown variety. It is more vigorous and earlier, producing pure white flowers of large size and good substance in large trusses. Is largely used for early forcing for cut flowers, being brought in without difficulty early in December. Can be grown in bowls of water and pebbles the same as Chinese Lilies.

Selected Bulbs 5c each; 50c per dozen; \$2.50 per 100

Mammoth Bulbs, of special value for growing in water.

7c each; 75c per dozen; \$7.50 per 100

GRAND MONARQUE. Pure white flowers of largest size, with yellow cup; borne on large heads.

10c each; \$1.00 per dozen; \$6.50 per 100

GRAND SOLIEL D'OR. Rich yellow flower with orange cup.

15c each; \$1.50 per dozen; \$10.00 per 100

GLORIOSA. White with orange cup.

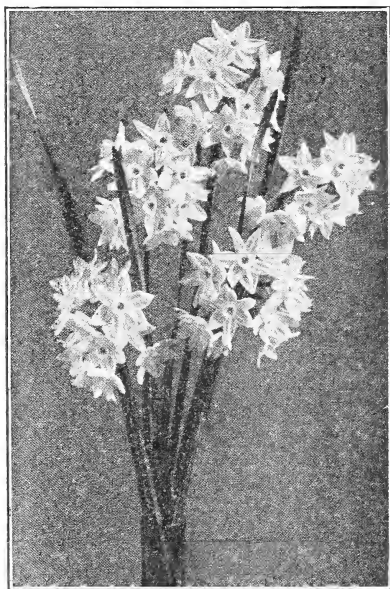
10c each; \$1.00 per dozen; \$2.50 per 100

MONT CENIS. A splendid large flowered variety having broad round overlapping petals of white, and large rich yellow cup; of compact growth, carrying large clusters of flowers.

10c each; \$1.00 per dozen; 6.50 per 100

MIXED POLYANTHUS NARCISSUS.

7c each; 70c per dozen; \$5.00 per 100



Narcissus Paper White Grandiflora

Chinese Sacred Lily or Oriental Narcissus

ALL orders should include these bulbs, as they have become most popular through their own merits, flowering in water and gravel in five to six weeks from time of planting.

They grow well in pots of soil, but the most popular way of blooming them is as follows:

Put about one inch of sand in a shallow bowl, or similar vessel, about four inches deep; place the bulb on this and pack it firmly with small pebbles or pieces of rock; then fill it with water to the top of pebbles and place in a warm sunny window. The bulb will at once commence a rapid growth and bloom in five or six weeks. Add fresh water as often as necessary.

It is not absolutely necessary to put the bulb in the dark, but, if shaded until the leaves begin to grow, better results may be obtained. By making a small incision across the top of the bulb, in two or three places, about three-quarters of an inch from the center it will cause a fresh lot of leaves and flower stalks to start from these points. This must be done with care, so as not to injure the bulb—simply cut the skin. For a window ornament they are unexcelled, and lend to an interior a cheerful aspect when all outside is frostbound and dreary. The effect is heightened when several are put in a large dish. They can be planted at different times, and have a succession of flowers all winter. Flowers often double and single from the same bulb.

SELECT BULBS, 15c each; (if by mail, 20c each); by express not prepaid \$1.25 per dozen.

Original baskets containing 30 bulbs, \$3.00.

LILY BOWLS. For Chinese Sacred Lilies and Polyanthus Narcissus: Imitation cut glass, to hold one bulb, 25c each; for 3 bulbs, 30c each.

PEBBLES, for filling Lily Bowls, 10c per quart.



Chinese Sacred Lily

Jonquils

EXCELLENT for early blooming. Charming, large, golden and deliciously odoriferous flowers, freely produced, of the finest effect either in garden, greenhouse or conservatory. May be successfully grown by everyone. Put six in a five inch pot and treat same as Hyacinths.

CAMPERNELLE RUGULOSUS DOUBLE-FLOWERING, a double form of the large flowering Campernelle; a novelty of great merit.
6c each; 60c per dozen; \$4.00 per 100

DOUBLE, fine golden yellow, very fragrant.
6c each; 60c per dozen; \$4.00 per 100

ODORUS RUGULOSUS, SINGLE, large flowering, deep yellow, crinkled flowers, exceedingly fragrant and very desirable for forcing or open garden.
6c each; 60c per dozen; \$4.00 per 100

SINGLE, sweet scented, deep yellow.
6c each; 50c per dozen; \$3.50 per 100

Calla Lilies (Richardia)

AN old favorite, and of easy culture, the only requisite for successful culture being rich soil and plenty of water when growing. By allowing them to rest through the summer, an abundance of bloom may be had the following winter.

WHITE CALLA OR LILY OF THE NILE

This old favorite is too well known to require any description.

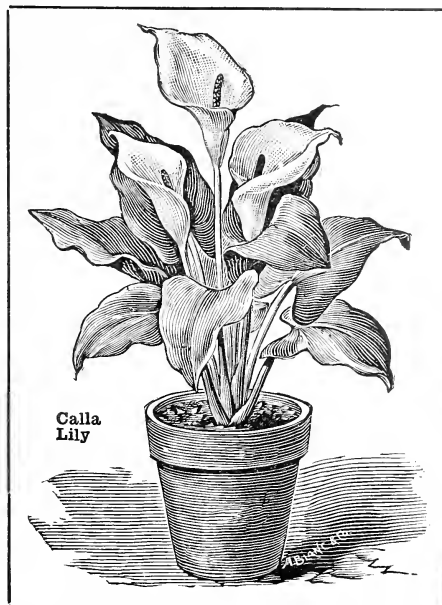
Monster Bulbs, postpaid.....30c each; \$3.00 per dozen

Extra Large Bulbs, postpaid.....25c each; \$2.50 per dozen

Large Bulbs, postpaid.....20c each; \$2.00 per dozen

ELLIOTTIANA. A yellow Calla of great beauty. It has the habit of growth of the white variety, with flowers of same size and shape, but of a rich golden yellow color; the foliage is dark green, with a number of creamy white spots, which add much to its beauty.
40c each; \$4.00 per dozen.

GODFREY OR EVERBLOOMING CALLA. Short, sturdy growth; very free flowering; medium sized white flowers; excellent for cutting, 20c each; \$2.00 per dozen. **Extra Large Bulbs**, 35c each; \$3.00 per dozen.



Chionodoxa (Glory of the Snow)

A hardy, early flowering bulbous plant which is closely allied to the Scilla but differs among other characters in having short tube to the Corolla. A good companion to the Scilla and Snowdrop.

GIGANTEA. Light blue, white eye, large flowered.....7c each; 70c per dozen; \$5.00 per 100

LUCILLAE. Bright blue with white eye.....5c each; 45c per dozen; \$3.00 per 100



Crocus

Crocus

THIS brilliant and universally admired spring flower will thrive in any soil or situation, but to be brought to the highest perfection it should be grown in an open bed or border of deep, rich, sandy loam. When planted in large groups or lines of distinct colors, the effect is very striking and the bulbs are now offered so cheap as to justify their liberal use. They are invaluable for pot culture. To secure a succession of bloom, commence planting early in October; 6 or 8 bulbs in a pot (the named varieties are best for this purpose), using rich soil and planting about an inch deep. Place the pots on a surface of ashes, cover the top one inch deep with soil until the leaves appear, when they may be removed to the house.

LARGE FLOWERING NAMED CROCUS

THESE are large bulbs of the best varieties, remarkable for richness of color and size of their flowers, and are the best to use for pot culture or where extra fine results are wanted.

	Per Doz.	Per 100
ALBION , lavender striped white and violet.....	\$0.20	\$1.25
BARON BRUNOW , purplish mauve, shading to deep purple at tips.....	.20	1.25
KING OF BLUES , light blue, large flower.....	.20	1.25
KING OF WHITES , pure white; extra large flower.....	.20	1.25
LA MAJESTEUSE , violet striped white; large flower.....	.20	1.25
MAMMOTH WHITE , pure white; extra large flower.....	.20	1.25
MAMMOTH YELLOW , large golden yellow.....	.30	2.00
MONT BLANC , large, pure white; extra.....	.20	1.25
NON PLUS ULTRA , light blue, with white border.....	.20	1.25
PRINCE ALBERT , dark blue; extra fine.....	.20	1.25
SIR WALTER SCOTT , white, striped with violet..	.20	1.25

MIXED CROCUS

The bulbs offered under this head are smaller than our Large Flowering Named Sorts, but are quite satisfactory for planting in the grass or for any position out of doors.

	Per Doz.	Per 100
Large White	\$0.20	\$1.00
Large Yellow.....	.20	1.00
Extra Large Yellow.....	.25	1.00
Large Blue and Purple.....	.20	1.00
Striped and Variegated.....	.20	1.00
Mixed, All Colors.....	.20	1.50

Eranthis Hyemalis

(Winter Aconite)

A HARDY bulbous plant with beautiful, bright yellow flowers, produced in early spring on stems about six inches high. Excellent for naturalizing in half shady places.

5c each; 45c per dozen; \$3.00 per 100

Freesia

THIS is one of the most popular and charming bulbs we offer for pot culture, flowering in the winter and spring, in the conservatory or window garden. Six bulbs should be planted in a four inch pot. They force readily, and can be had in bloom by Christmas if desired. The flowers are produced six to eight on stems about nine inches high, and are particularly useful for cutting, remaining in good condition, kept in water, for two weeks.

IMPROVED PURITY. A distinct and greatly improved type producing large sprays of pure white flowers with a yellow blotched throat of immense size and delicious fragrance. It is very free blooming and of great value for forcing for cut flowers.

Large Bulbs.....25c per dozen; \$1.50 per 100

Mammoth Bulbs.....40c per dozen; 2.50 per 100

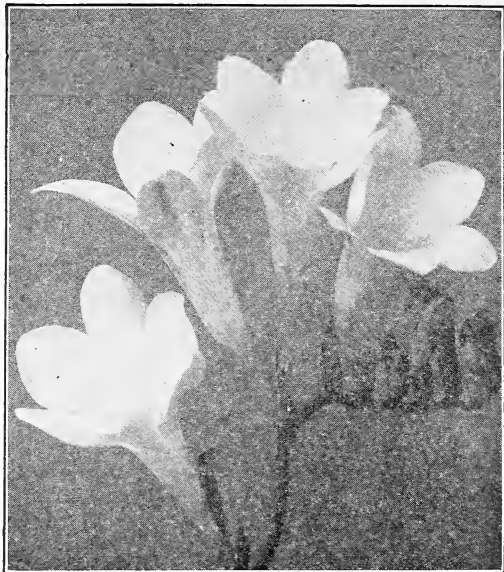
Monster Bulbs.....60c per dozen; 4.00 per 100

RAINBOW. We can now supply this long waited for, beautifully colored Freesia.

Lavender, Large Bulbs.....60c per dozen; \$4.00 per 100

Pink, Large Bulbs.....60c per dozen; 4.00 per 100

Finest Mixed, all colors.....50c per dozen; 3.50 per 100



Freesia, Improved Purity

Grape Hyacinth (Muscaria)

Charming, hardy spring flowering bulbs. They are something like the Hyacinth but the clusters are smaller and the individual flowers are smaller and of different shape; invaluable for naturalizing.

BOTRYOIDES ALBA. White.....5c each; 50c per dozen; \$3.25 per 100

BOTRYOIDES COERULEA. Blue.....5c each; 45c per dozen; \$3.00 per 100

HEAVENLY BLUE. The best and largest of the Grape Hyacinths. Good for pot culture as well as for outdoors. 5c each; 50c per dozen; \$3.25 per 100

Iris Spanish (Iris Hispanica)

THESE have appropriately been called "the Orchids of the Hardy Flower Garden." They are of the simplest culture, succeeding in almost any soil or position. The bulbs should be planted 2 to 3 inches deep and 6 inches apart, early enough in the autumn to allow them to make some growth before hard frost comes. For best effect they should be planted in beds or groups of 25 to 100 or more bulbs—the larger the number the finer the effect. They flower in June, and the bulbs may either be lifted or allowed to remain for another season.

BELLE CHINOISE. Golden yellow, dwarf, early.

CAJANUS. Canary yellow, with orange blotches on falls.

FLORA. White with light blue markings; large flower.

KING OF BLUES. Deep purplish blue; extra fine.

KING OF WHITES. Pure white, large flowered, beautiful variety.

PRINCE HENRY. Dark bronze, large flower; vigorous grower.

QUEEN WILHELMINA. Pure white, large flower.

Above named varieties.....6c each; 60c per dozen; \$4.00 per 100

FINEST MIXED. All varieties.....5c each; 50c per dozen; \$3.50 per 100

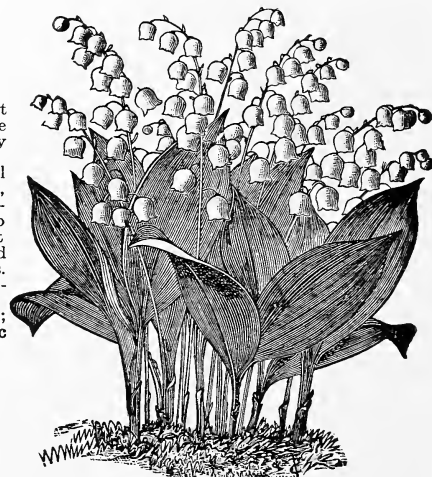
Lily of the Valley

THIS popular and fragrant flower should receive more attention than is usually given.

Like most other plants it well repays for being well treated, and if given a liberal top-dressing of well-rotted stable or sheep manure in fall or early spring, it will show the effect by increased size and vigor of the flowers.

We offer strong clumps suitable for outdoor planting.

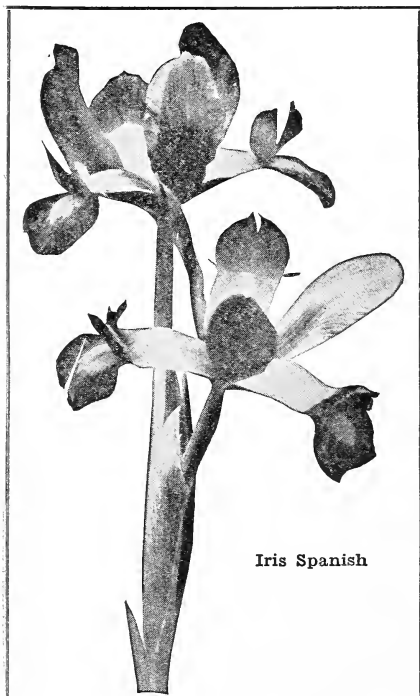
50c each; \$5.00 per dozen; \$40.00 per 100; by mail 60c each.



Lily of the Valley

Suburban Lawn Grass Seed

SUBURBAN Lawn Grass Seed, sown in fall, makes beautiful and permanent lawns. It is also a good time to repair damage done by fall grass, by raking it out as soon as it dies down and sowing Lawn Grass Seed on the bare spots.



Iris Spanish

Lilies

NO CLASS of plants capable of being cultivated out of doors possesses so many charms. Rich and varied in color, stately and handsome in habit, profuse in variety, and of delicious fragrance, they stand out prominently from all other hardy plants, and no herbaceous border, however select, should be without a few of its best sorts. With a well selected collection, Lilliums may be had in bloom from June until October.

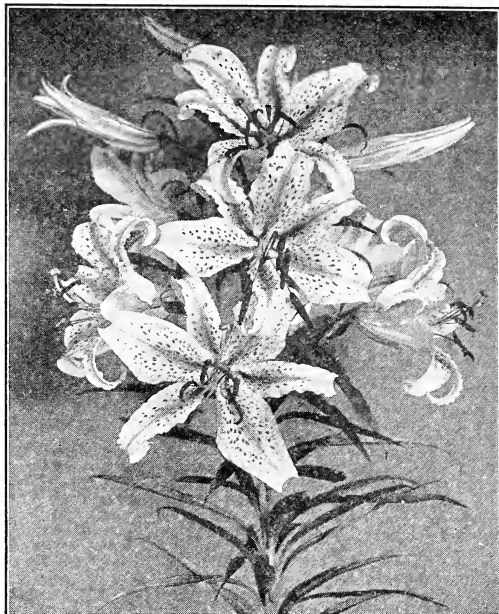
Culture. They should be planted in good, rich, loamy soil, abundantly mixed with very rotten cow manure. Plant about four inches deep, and during the winter it is advisable to cover the surface of the bed with a thin layer of manure, which will not only afford a slight protection to the bulbs, but will materially enrich the soil. In spring the manure may either be removed or dug in between the rows.

Pot Culture. The best soil to use is a rich loam, with the addition of one-third well-rotted manure. Select a large sized pot, say eight or ten inches, so as to allow of deep planting—a most essential matter where there are upper roots to protect. Dust a little charcoal about the bulb to keep it fresh, and cover at least two inches with soil.

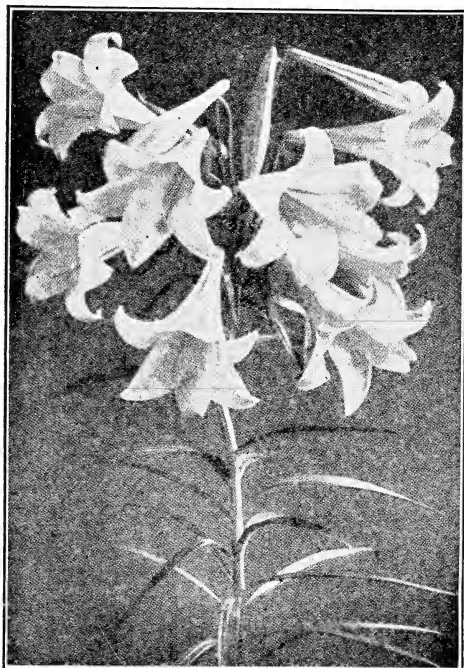
After potting, one of the most important things to observe is the proper placing of the pots containing the bulbs. Like all other bulbs, to get the best results in flowering, the pots must be filled with roots before the top starts to grow; and to do this, they must be placed in some cool place and excluded from the light, until, on examination the roots are found to be formed around the ball of earth.

Orders for Lilies cannot be filled before November, excepting Candidum and Harrisii, which are ready August 1.

Prices on single bulbs are postpaid. By the dozen or hundred, they will be forwarded at expense of purchaser.



Lilium Auratum



Lilium Longiflorum Giganteum

border plants, and also excellent for pot culture. All are perfectly hardy, and are among the most satisfactory Lilies to grow.

SPECIOSUM ALBUM. Pure white, very fragrant.

Large Bulbs 8 to 9 inches, 30c each; \$2.50 per dozen; \$20.00 per 100
Extra Large Bulbs 9 to 11 inches, 40c each; \$4.00 per dozen; \$30.00 per 100

SPECIOSUM RUBRUM or ROSEUM. White, suffused and spotted with crimson.

Large Bulbs 8 to 9 inches, 35c each; \$3.50 per dozen; \$25.00 per 100
Extra Large Bulbs 9 to 11 inches, 50c each; \$5.00 per dozen; \$35.00 per 100

TIGRINUM. "Tiger Lily." Orange-salmon, spotted with black 25c each; \$2.25 per dozen; \$17.50 per 100

TIGRINUM FLORA PLENO. "Double Tiger Lily." This is a plant of stately habit, bearing an immense number of double, bright orange-red flowers, spotted with black; 3 to 5 feet. August 25c each; \$2.50 per dozen; \$20.00 per 100

If you contemplate making a Lily bed, kindly give us dimensions of same, and we will be pleased to submit you an estimate, stating suitable varieties and lowest cost.

AURATUM. (Golden-banded Lily). Undoubtedly one of the finest, its large, graceful, fragrant flowers are composed of six petals of a delicate ivory-white color, thickly studded with chocolate crimson spots, and striped through the centre with a golden yellow band; 3 to 5 feet.

Large Bulbs, 8 to 9 inches, 30c each; \$2.50 per dozen; \$20.00 per 100
Extra Large Bulbs, 9 to 11 inches, 40c each; \$4.00 per dozen; \$30.00 per 100.

CANDIDUM. (Annunciation or Madonna Lily). The flowers are pure white and very fragrant, borne on long stems. To succeed with it, it should be planted early in the autumn, so that it can make some growth before frost; 3 to 4 feet; May-June.

Extra Large Bulbs, 25c each; \$2.25 per dozen; \$17.50 per 100.

HARRISII. (Bermuda Easter Lily). This splendid Lily is undoubtedly one of the best for house culture, as it comes quickly into bloom and flowers freely. The flowers are trumpet-shaped, pure waxy-white and delightfully fragrant.

Large Bulbs, 5 to 7 inches, 25c each; \$2.25 per dozen; \$17.50 per 100
Extra Large Bulbs, 7 to 9 inches, 40c each; \$4.00 per dozen; \$30.00 per 100.

HENRYI. A splendid lily from the mountains of China. It grows 4 to 5 feet high, producing large panicles of orange-yellow flowers, banded with green. 50c each; \$5.00 per dozen.

LONGIFLORUM FORMOSUM. The plant grows about 3 feet high and produces beautiful, snow white, trumpet-shaped flowers, 6 to 8 inches long. It is perfectly hardy, blooming in the open in June and July. This Lily is also a very important winter flowering type.

Large Bulbs, 7 to 9 inches, 35c each; \$3.50 per dozen; \$25.00 per 100

LONGIFLORUM GIGANTEUM. A splendid type, later flowering than the others, but of strong, free, healthy growth, and while it can be forced into bloom for Easter it is just the thing for Decoration Day and later flowering; quite hardy and good for outdoor planting.

Large Bulbs, 7 to 9 inches 35c each; \$3.50 per dozen; \$25.00 per 100

REGALE (The Regal Lily). This grand new species is acknowledged to be the finest Lily in cultivation and is undoubtedly the most popular novelty that has been offered for many years. It is absolutely hardy and is excellent for forcing under glass. The white flowers are long, trumpet-shaped, slightly suffused with pink, with a beautiful shade of canary yellow at the centre, extending part way up the trumpet. It is delightfully perfumed, but without the heavy, oppressive odor of most Lilies. 65c each; \$6.50 per dozen.

SPECIOSUM. "Japan Lily." The varieties of this class are magnificent.

Scilla

(Squills; Harebell)

VERY early flowering bulbs, doing well in ordinary soil, producing fine, graceful spikes of bell-shaped flowers. Very showy and attractive as pot plants, and require about the same treatment as Hyacinths.

The Scilla Campanulata are splendid for naturalizing because they will flower in shady places.

Scilla Siberica is used as a companion to Crocus for borders or massing.

Campanulata Blue Queen. Large, bright blue flowers.

6c each; 50c per dozen; \$3.50 per 100

Siberica. A perfect gem, with flowers of richest blue, dwarf and hardy, excellent planted with Crocus and Snowdrops, or in borders and massing.

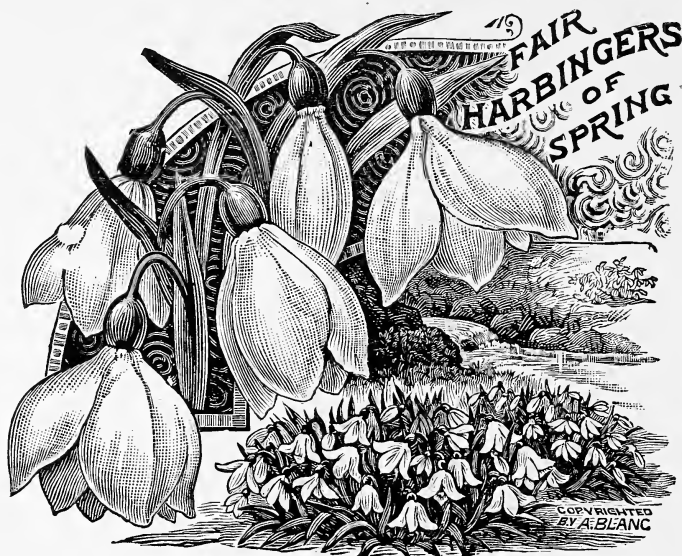
7c each; 70c per dozen; \$5.00 per 100

Snowdrops

ONE of the earliest white flowers of spring. They should be planted in beds in the border, or in clumps in the lawn, and will endure any amount of hard treatment; still, no flower better repays care and attention. Plant the bulbs in September or October—the earlier the better—to enable them to become well-established before freezing weather, set about two or three inches deep, and one inch apart, in clumps or triple rows; if planted singly they are not conspicuous. The bulbs should not be kept long out of the ground, and should not be disturbed oftener than once in 2 or 3 years. For growing in pots or baskets, the double are the better.

Single Flowering, 5c each; 45c per dozen; \$3.00 per 100.

Double Flowering, 6c each; 60c per dozen; \$4.00 per 100



Snowdrops



Hyacinth Glasses

Hyacinth Glasses and Lily Bowls CAN NOT be sent by mail.

BELGIAN OR TALL SHAPE—Blue, Claret, Crystal and Green Colors.
35c each; \$3.50 per dozen.

MATT GREEN HYACINTH VASES. Tye Pattern.
50c each; \$5.00 per dozen.

Lily Bowls

For Chinese Sacred Lilies and Polyanthus Narcissus

LILY BOWLS—Imitation Cut Glass—to hold 3 Bulbs.
30c each; for 5 Bulbs, 35c each.

MATT GREEN LILY BOWLS—To hold 3 Bulbs, 40c each; 4 Bulbs, 50c each; 6 Bulbs, 75c each.

FANCY LILY BOWLS—Assorted Colors—to hold 3 Bulbs, 50c each; 4 Bulbs, 75c each; 6 Bulbs, \$1.00 each.

PEBBLES—For filling Lily Bowls, 10c per quart.

MICA GRIT—For filling Lily Bowls, 15c per quart.

Prepared Bulb Fibre

Growing bulbs, such as Roman Hyacinths Dutch Hyacinths, Tulips and Narcissus in special prepared fibre has proven a great success.
50c per peck; \$1.75 per bushel.

Mushroom Spawn

One Pound of Spawn is sufficient for a bed 2 x 6 feet.

English Milltrack Mushroom Spawn. Prices by express—customer to pay charges. 25c per brick; 20c per lb.; 10 lbs. \$1.75; 100 lbs. \$15.00. By mail 30c per brick, postpaid.

American Made Pure Culture Mushroom Spawn. By express—customer to pay charges. 30c per brick; 5 bricks \$1.25; 100 bricks \$20.00. By mail, 35c per brick, postpaid.

McCullough's Selected Flower Seeds

FOR FALL AND WINTER SOWING

ON the following pages we give a list of the **Best Hardy Perennials** which are now so deservedly popular. Sown this fall in a cold frame or protected corner of the garden, you can have, with little trouble, an abundant supply of Columbinas, Canterbury Bells, Delphiniums, Foxgloves, Gaillardias, Hollyhocks, Forget-me-nots, Daisies, Sweet Williams, etc., etc., the following season. The list also includes a choice selection of other Flower Seeds for autumn sowing, such as Cyclamens, Pansies, Primulus, etc.

- 1—**ABUTILON.** (Chinese Bell Flower). Finest mixture. Half hardy Perennial. 10c pkt.
9—**ALYSSUM, Little Gem or Carpet of Snow.** Dwarf compact habit; pure white flowers. 15c ¼ oz.; 50c oz.; 5c pkt.
11—**ALYSSUM, Sweet.** Of trailing habit; flowers white. Hardy Annual. 10c ¼ oz.; 25c oz.; 5c pkt.

ANTIRRHINUM. (Snapdragon). Half-hardy Perennial.

TALL, GIANT FLOWERING

- 14—**Queen Victoria.** Flowers white, shaded cream. 10c pkt.
15—**Silver Pink.** Delicate rosy-pink. 10c pkt.
16—**Brilliant.** Scarlet, gold and white. 10c pkt.
17—**Fire King.** Scarlet with orange. 10c pkt.
18—**Venus.** Light rose, white throat. 10c pkt.
19—**Golden King.** Golden-yellow flowers. 10c pkt.
20—**Special Collection.** One packet each of the above 6 varieties. 50c.
21—**Tall Giant Mixed.** A splendid mixture, containing all the colors. 30c ¼ oz.; \$1.00 oz.; 5c pkt.

SEMI-DWARF GIANT FLOWERING ANTIRRHINUM.

- 22—**Carmine Queen.** Brilliant rose-carmine. 10c pkt.
23—**Daphne.** Blush pink. 10c pkt.
24—**Defiance.** Fiery scarlet. 10c pkt.
25—**Firebrand.** Bright scarlet, yellow lips. 10c pkt.
26—**Golden Queen.** Pure yellow. 10c pkt.
27—**Queen of the North.** Pure white, long spikes. 10c pkt.
28—**Special Collection.** One packet each of the above six varieties. 50c.
29—**Ruby.** Brilliant red. 10c pkt.
30—**Half-Dwarf Mixed.** Large variety of colors; best for bedding. 20c ¼ oz.; 5c pkt.

AQUILEGIA, OR COLUMBINE. Hardy Biennial.

- 90—**Coerulea Hybrids, "Rose Queen".** Large, long-spurred flowers, shading from light pink to dark rose with white center and yellow anthers. 3 pkts., 25c; 10c pkt.
91—**McCullough's Long-Spurred Hybrids.** Blue, white, yellow, orange, scarlet and bright rose-pink in large flowers with long spurs. 3 pkts., 25c; 10c pkt.
92—**Double.** All colors, mixed. 20c ¼ oz.; 5c pkt.
93—**Single.** All colors, mixed. 20c ¼ oz.; 5c pkt.

All 5c Packets of Flower Seeds are 6 Packets for 25c. All 10c Packets are 3 Packets for 25c.

FLOWER SEEDS—Continued

BELLIS. (English Daisy). *Half-hardy Perennials.*

- 107—Longfellow. Large, double, dark pink. 10c pkt.
108—Snowball. Double white flowers. 10c pkt.
109—Giant Double Mixed. Extra fine mixture. 10c pkt.
113—CALCEOLARIA, *Hybrida Grandiflora*. Large flowers of fine form, rich colors, beautifully spotted and marbled; finest strain in cultivation. *Greenhouse Perennial.* 2 feet. 25c pkt.

CAMPANULA. (Canterbury Bells). *Hardy Biennial.* *Calycanthema.* (Cup and Saucer Canterbury Bells).

- 121—Pink. Delicate rosy-pink. 10c pkt.
122—Blue. A fine clear shade. 10c pkt.
123—White. Pure white. 10c pkt.
124—Finest Mixed. All colors of the Cup and Saucer type. 50c ¼ oz.; 5c pkt.

Medium. (Single Canterbury Bells).

- 125—Single Mixed. All colors. 25c ¼ oz.; 5c pkt.
126—Double Mixed. All the double-flowering medium varieties. 40c ¼ oz.; 5c pkt.

CANDYTUFT. *Hardy Annual.*

- 128—Giant Hyacinth Flowered. Pure white flowers in a pyramid of bloom.

25c, ½ oz.; 40c, oz.; 5c pkt.

- 129—Little Prince. Very large heads of pure white flowers; fine for borders and pots; 6 inches, 5c pkt.

- 130—Rose Cardinal. Bright carmine rose. 5c pkt.

- 131—White Rocket. Pure white. 25c, oz.; 5c pkt.

- 132—Dwarf Hybrids Mixed. 5c pkt.

- 133—Mixed Colors. 15c, ½ oz.; 25c, oz.; 5c pkt.

HARDY CANDYTUFT, see Iberis.

CARNATION. *Half-hardy Perennials.*

Indispensable both for greenhouse culture in winter and the garden in summer.

- 136—Earliest French Mixed. 50c, ¼ oz.; 10c pkt.

- 138—Marguerite. Is best for summer flowering. Finest mixed; excellent for cutting. 50c, ¼ oz.; 5c pkt.

- 167—CINERARIA, *Hybrida Grandiflora*. Large flowering exhibition varieties embracing the richest and most varied showy and attractive colors. *Greenhouse or Tender Annual.* 25c pkt.

- 120—COREOPSIS, *Lanceolata Grandiflora*. Bright golden yellow flowers with broad fringed petals on long stems; excellent for cutting. *Hardy Perennial.* 25c, ¼ oz.; 10c pkt.

- 187—CYCLAMEN, *Giant-Flowered*. (*Persicum Giganteum*). A popular pot-plant for winter and spring-flowering. Seedlings bloom in eight to ten months. *Greenhouse Perennial*. Best strains, mixed. 25c pkt.

DELPHINIUM. (Hardy Perennial Larkspur). *Hardy Perennial.*

- 191—Giant - Flowering Hybrids. These magnificent Hybrids, produce beautiful spikes of immense flowers, single, semi-double and double. Flower spikes are from 2 to 3 feet in length. Colors are beautiful, ranging from pure white through all shades of lavender and blue. (See cut.) 10c pkt.

- 192—Belladonna. (Everblooming Hardy Larkspur). Free blooming Hardy Larkspur, never being out of flower from the end of June until frost. The clear turquoise-blue of its flowers is not equalled for delicacy and beauty by any other flower. 10c pkt.

- 193—Elatum. (Bee Larkspur). Rich deep blue, free blooming, 4 feet. 5c pkt.

- 194—Formosum. Beautiful spikes of brilliant rich blue flowers with a white center, 2 ½ feet. 5c pkt.

- 195—Chinese Varieties, Mixed. Contain a great variety of shades, from pure white to gentian-blue. 5c pkt.

- 203—DIANTHUS, *Plumarius Semperflorens*. (*Ever-blooming Hardy Garden Pink*). Very beautiful, sweet-scented, double, semi-double and single flowers in great diversity of colors. 10c pkt.

DIANTHUS BARBATUS. (See Sweet William).

- 208—DIGITALIS. (Foxglove). *Hardy Biennial*. A splendid strain; 3 to 5 feet. Finest Mixed. 10c pkt.

- 221—GAILLARDIA, *Grandiflora*. (Blanket Flower). The flowers are of enormous size and the colors the most varied; in flower for about three months. *Hardy Perennial*. 2 feet. 5c pkt.

- 247—HIBISCUS. (Marshmallow). Mallow Marvels. Immense flowers from 8 to 10 inches in diameter, in the following colors; fiery-crimson, blood-red, shell-pink and white. *Hardy Perennial.* 10c pkt.

HOLLYHOCK. For planting among shrubbery or forming a background for other flowers, it is without an equal. *Hardy Perennial.*

- 248—Chater's Double Pink. 10c pkt.
249—Chater's Double Rose. 10c pkt.
250—Chater's Double Scarlet. 10c pkt.

- 251—Chater's Double White. 10c pkt.

- 252—Chater's Double Yellow. 10c pkt.

- 253—Chater's Prize, Double Mixed. Unrivalled in richness and delicacy of coloring. 25c, 3 pkts.; 10c pkt.

- 254—Choice Double Mixed, 5c pkt.

- 255—Mammoth Fringed Allegheny. Mammoth flowers; the colors range from the palest shrimp-pink to deep red, 6 to 7 feet. 25c, 3 pkts.; 10c pkt.

- 256—Single. Finest Mixed; all colors. 5c pkt.

IBERIS. (Hardy Candytuft.)

- 261—Sempervirens. A white-blooming plant, coming in flower early in the spring; much used for cemeteries, rockeries, etc., 1 foot. *Hardy Perennial.* 5c pkt.

LATHYRUS. (Everlasting, or Hardy Pea). Free-flowering climbers; continually in bloom; fine for cutting. *Hardy Perennial.*

- 271—Latifolius "White Pearl." The finest white. 10c pkt.

- 272—Pink Beauty. Rosy pink. 10c pkt.

- 273—Mixed. All colors. 15c, ¼ oz.; 40c, oz.; 5c pkt.

MIGNONETTE. (Reseda). *Half-hardy Annual.*

- 288—Defiance. Enormous spikes, with individual florets of immense size; fragrant; excellent for forcing. 20c, ¼ oz.; 10c pkt.

- 289—Machet. Dwarf pyramidal growth, large spikes; fragrant; one of the best for forcing. 20c, ¼ oz.; 10c pkt.

- 290—Sweet-Scented. The old variety but very sweetly scented. 15c, oz.; 5c pkt.

MYOSOTIS. (Forget-me-not). *Half-hardy Perennial.*

- 299—Alpestris Victoria. Early flowering, of bushy habit, bearing large, bright azure-blue flowers. 10c pkt.

- 300—Palustris. The true Forget-me-not; beautiful blue flowers; 6 inches. 10c pkt.

- 301—Palustris Semperflorens. A dwarf Forget-me-not continuing in bloom from early spring until autumn; blue flowers. 10c pkt.

PHLOX DECUSSATA. *Hardy Perennial.*

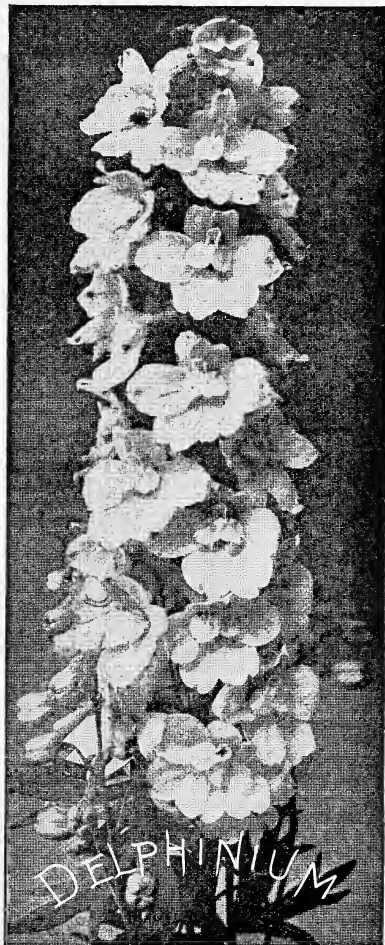
- 381—Mixed. In the greatest variety of colors. 3 feet. 60c ¼ oz.; 10c pkt.

POPPY. *Hardy Perennials.* Iceland. (*Papaver Nudicaule*). Of neat habit, with bright green, fern-like foliage, forming in tufts, bearing brilliant flowers in endless profusion on slender stalks about 12 inches high.

- 398—Finest Mixed. All colors. 25c ¼ oz.; 5c pkt.

- 396—ORIENTALE. (The large Oriental Poppy). Large, deep crimson flowers, having a conspicuous black blotch on each petal; exceedingly showy. 25c ¼ oz.; 5c pkt.

- 397—Orientale Hybrids. Produce flowers of immense size and of many novel colors, such as salmon, pink, cherry, etc. 50c ¼ oz.; 10c pkt.



Delphinium Giant Hybrid

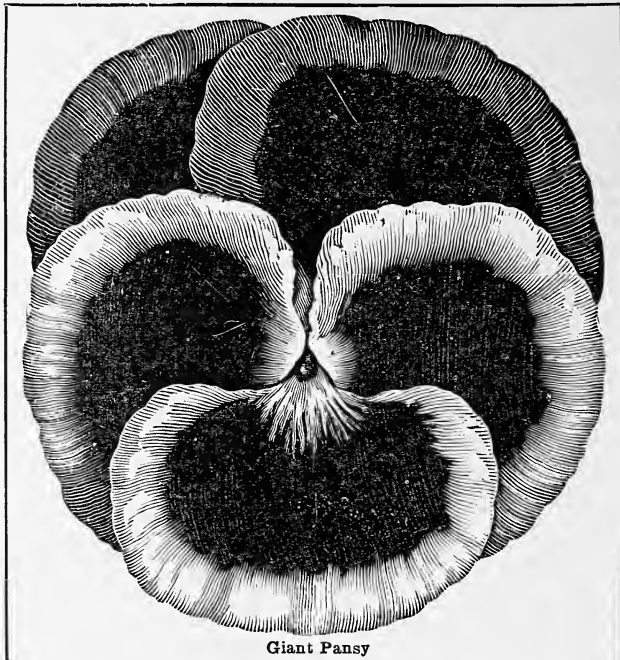
FLOWER SEEDS—Continued.

PANSY

PANSY seed has always been a leading specialty with us. Seed germinates best while soil is still cool and moist. Would advise sowing in shallow drills in seed-bed early in spring when the trees are starting out in leaf, and again in September when the weather becomes cool. Plants from the spring-sown seed flower with great freedom throughout spring, summer and fall, while the stocky young plants grown in fall and winter produce the largest and finest flowers early the following spring. Take care of the weakest looking seedlings, as they usually give the finest flowers. *Half-hardy Perennial.*

Giant Flowered Pansies

- 339—Blue Perfection.** The best dark blue flowers of immense size.50c, $\frac{1}{8}$ oz; 15c pkt.
- 340—Bridesmaid.** White shining rose, beautifully blotched.50c, $\frac{1}{8}$ oz; 15c pkt.
- 341—Bugnot's Superb Blotched.** A French strain of extra large size, choicest colors, with beautiful broad blotches and delicate pencillings. Finest mixed.75c, $\frac{1}{8}$ oz; 20c pkt.
- 342—Canary Bird.** Giant five-spotted yellow.60c, $\frac{1}{8}$ oz; 15c pkt.
- 343—Cassier's Giant.** A very showy strain saved from large and beautifully blotched flowers.60c, $\frac{1}{8}$ oz; 15c pkt.
- 344—Golden Queen.** Golden yellow, very fine.50c, $\frac{1}{8}$ oz; 10c pkt.
- 345—King of Blacks.** Lustrous jet black flowers of immense size.50c, $\frac{1}{8}$ oz; 10c pkt.
- 346—Madame Perrett.** Colors dark wine, pink and red, with edges of petals frilled and bordered white.50c, $\frac{1}{8}$ oz; 10c pkt.
- 347—Masterpiece.** The enormous flowers are borne well above the foliage on strong stems. The petals of the flowers are waved or curled and contain the richest colors. Each petal is distinctly marked with a large dark blotch and most of the flowers are margined with a light, white or yellow edge.60c, $\frac{1}{8}$ oz; 15c pkt.
- 348—Orchid Flowered.** Beautiful light shades, large frilled flowers.50c, $\frac{1}{8}$ oz; 15c pkt.
- 349—Snowflake.** The finest and largest pure white flowers.50c, $\frac{1}{8}$ oz; 10c pkt.
- 350—Triumph.** A beautiful, showy class, very large frilled flowers, in a great variety of rich colors; extra fine.75c, $\frac{1}{8}$ oz; 20c pkt.
- 351—McCullough's "Premier."** The cream of American and European Specialists. In this magnificent mixture of mammoth-flowering Pansies the blossoms are borne on long stems well above the foliage and are distinguished for their gorgeous and varied colorings and beautiful markings; of fine substance, velvety texture, perfect form, and giant size, frequently measuring 3 inches in diameter. The colorings are wonderfully rich and varied; every shade and tint of rose, canary-yellow, black, white, cream, lavender, garnet, sky-blue and orange are produced in endless variation.\$1.00, $\frac{1}{8}$ oz; \$1.75, $\frac{1}{4}$ oz; 25c pkt.
- 352—McCullough's Special Mixture.** A superior mixture, selected from choice, large flowering strains. This strain is one of great excellence, the individual flowers being superb and include many fine shades in a number of colorings, and is intended to supply the want of a first-class mixture at a moderate price.60c, $\frac{1}{8}$ oz; \$1.00, $\frac{1}{4}$ oz; 15c pkt.
- 353—McCullough's Choice Mixed.** Great diversity of colors, free flowering; blossoms are slightly smaller than the Giant sorts.15c, $\frac{1}{8}$ oz; 25c, $\frac{1}{4}$ oz; 5c pkt.
- 355—PETUNIA. Double Grandiflora Mixed.** Choicest strains of fine colors and large flowers. *Hardy Annual.*25c pkt.
- 357—Single. McCullough's Mammoth.** The finest mixture of petunias procurable.50c, 3 pkts; 20c pkt.
- PRIMULA.** They are one of the most important winter-blooming pot plants in the home or conservatory
- 405—Chinensis Fimbriata.** Finest Mixed. All colors.20c pkt.
- 406—Obconica Grandiflora.** Large flowers with finely fringed and toothed petals; a beautiful pot plant.10c pkt.
- 407—Obconica Gigantea.** Strong vigorous growth with immense heads of large individual blooms.25c, 2 pkts; 15c pkt.
- 408—Forbesi.** (Baby Primrose). Rosy lilac flowers, fine for pots.25c, 3 pkts; 10c pkt.
- 409—Malacoides.** A fine house plant, somewhat like P. Forbesi, but larger in all its parts; flowers delicate lilac.15c pkt.
- HARDY PRIMROSES.** These are among the best of the early spring-blooming plants. *Half-hardy Perennial.*
- 410—Auricula.** Finest mixed. Extra choice; saved from a prize collection.10c pkt.
- 411—Veris.** (Polyanthus). Splendid colors; extra fine.10c pkt.



- 412—Vulgaris.** True English Primrose; canary yellow, fragrant flowers.10c pkt.
- 413—PYRETHRUM. Single Hybrids.** Large flowers and choicest colors; saved from named varieties. *Hardy Perennial.* Finest Mixed.10c pkt.
- 438—SCABIOSA. Caucasica.** (Blue Bonnet). Especially valuable for cutting, the blooms lasting a long time in water; lilac-blue; 3 feet. *Hardy Perennial.*10c pkt.
- 166—SHASTA DAISY.** A grand, large-flowering Daisy of hardy robust growth; white flowers.25c, 3 pkts; 10c pkt.
- 443—STOCK, (Gilliflower).** McCullough's Cincinnati Market. A grand variety producing one long sturdy spike closely set with enormous double white flowers; a fine forcer.10c pkt.
- 444—Princess Alice.** (Cut and Come Again). Pure white clusters of fragrant blossoms; excellent for cutting.10c pkt.
- 458—STOKESIA, (Cornflower or Stokes' Aster) Cyanea.** A hardy perennial, producing handsome lavender-blue, cornflower-like blossoms; in full bloom from July till frost; one of the best hardy border plants.10c pkt.
- SWEET WILLIAM, (Dianthus Barbatus).** *Hardy Perennial.*
- 466—Pink Beauty.** Salmon-pink flowers.5c pkt.
- 467—Holborn Glory.** The flowers are of extraordinary size and color, all showing a clear, white eye.5c pkt.
- 468—McCullough's Selected Single Mixed.** A very choice assortment of all the best single-flowering varieties.20c, $\frac{1}{4}$ oz; 5c pkt.
- 469—Double Red.** Very effective, rich, deep red variety.5c pkt.
- 470—Double White.** Excellent for cut flowers.5c pkt.
- 471—Double Mixed.** This mixture you will find of very superior quality, containing all colors and shades.5c pkt.
- VINCA, (Madagascar Periwinkle, or Old Maid).** Ornamental, free-blooming plants. *Tender Annuals.*
- 519—Rosea.** Rose, dark eye.10c pkt.
- 520—Alba Rosea.** White, crimson eye.10c pkt.
- 521—Alba Pura.** Pure white.10c pkt.
- 522—Mixed.**25c, $\frac{1}{4}$ oz; 5c pkt.
- VERBENA. Half-hardy Annuals.**
- 523—Gigantea Lucifer.** Flowers intense brilliant scarlet with no eye.10c pkt.
- 524—Gigantea Finest Mixed.** Choice mixture of colors.10c pkt.
- 525—Mammoth Defiance.** Brilliant scarlet, fine for bedding.10c pkt.
- 526—Mammoth Candidissima.** Large trusses of pure white flowers.10c pkt.
- 527—Mammoth Blue.** Bright blue, in various shades.10c pkt.
- 528—Mammoth Pink.** Bright shades of pink.10c pkt.
- 529—Mammoth. Finest Mixed.** A fine strain of beautiful colors and shades.25c, 3 pkts; 10c pkt.

All 5c Packets of Flower Seeds are 6 Packets for 25c. All 10c Packets are 3 Packets for 25c.



McCULLOUGH'S "SUBURBAN" LAWN GRASS SEED

(Trademark Registered)

McCullough's "Suburban"
Lawn Grass Seed

IS a mixture of the finest Dwarf Evergreen Grasses that grow and flourish during different months of the year so that a rich, deep green, velvety lawn is constantly maintained. Our mixture is the result of several years experimenting, and, as we now offer it, is unequalled. The quantity required for making a new lawn is four bushels (64 lbs.) per acre, or for renovating old lawns, two bushels (32 lbs.) per acre. For a plot 15 x 20, or 300 square feet, one pound is required for a new lawn, or about one-half pound for renovating.

How to Make a Lawn.—The matchless beauty of a well kept lawn instantly commands the attention of all lovers of the beautiful in Nature, because a fine lawn is an unfailing mark of intelligence and taste, to obtain which, the main point is to start right. Seed will make a better lawn than turf or sod. The best soil is a good medium texture. The surface should be thoroughly pulverized and smoothed to the desired grade; remove all large stones, roots and hardened pieces of earth that can not be readily broken, ample time being allowed for the thorough settling of the soil, which is greatly aided by a few heavy showers of rain. When the soil is firm, level and suitably moist, sow "Suburban" Lawn Grass Seed at the rate of four bushels (64 lbs.) per acre. It is unwise to be too economical in the quantity of seed used, if the best results are desired. The seed should be sown broadcast and as evenly as possible; then give a thorough rolling or pat well with the back of a spade. The seed must be well firmed in the soil. When the young grass attains sufficient height, it should be mown with a lawn mower every week or ten days, according to the season. In dry weather keep the lawn well watered.

General Surface Renovating.—When your lawn has been established, you will find it to your advantage to lightly re-seed each season. As early as possible, carefully rake off all dead leaves, etc., and give the lawn a dressing of our PULVERIZED SHEEP MANURE, or our PURE BONE MEAL at the rate of at least 500 pounds per acre, and rake in, after which sow our "Suburban" Lawn Grass Seed at the rate of two bushels (32 lbs.) to the acre; roll thoroughly or pat with the back of a spade.

Prices:— $\frac{1}{2}$ lb., 20c; 1 lb., 35c; 5 lbs., \$1.60; $\frac{1}{2}$ bu., (8) lbs., \$2.50; per bu. of 16 lbs., \$4.50.
Postage Must be Added if Wanted by Mail. See Postal Rates, Second Page of Cover.

"SHADY PLACE" Lawn Grass Seed

ON nearly all lawns there are more or less shady places, which result in having bare and unsightly spots on which the owners have difficulty in securing a satisfactory stand of grass. After many years of experimenting with different grasses, both native and foreign, we several years ago developed our present "Shady Place" Lawn Grass Seed Mixture. This mixture of grasses is adapted for such places, as it is composed of dwarf-growing grasses which are found naturally growing in shady locations. Sow the seed at the rate of four bushels (64 lbs.) per acre, or 1 lb. to each 300 square feet, after which roll thoroughly.

$\frac{1}{2}$ lb., 25c; 1 lb., 40c; 5 lbs., \$1.85; $\frac{1}{2}$ bu. (8 lbs.), \$2.75; 1 bu. (16 lbs.), \$5.00.

"EDEN PARK" Lawn Grass Seed

THE quality of this lawn grass seed will compare favorably with a majority of the lawn grass mixtures on the market, as it contains practically the same grasses as our "Suburban," but without reseedling.

$\frac{1}{2}$ lb., 20c; 1 lb., 30c; 5 lbs., \$1.35; $\frac{1}{2}$ bu. (8 lbs.), \$2.00; 1 bu. (16 lbs.), \$3.75.

TERRACE MIXTURE

THERE is nothing more annoying than to have ground washed out. In this mixture we have put quick-growing and deep-rooted grasses. Of course, it depends a great deal on this being well started before very heavy rains.

$\frac{1}{2}$ lb., 20c; 1 lb., 35c; 5 lbs., \$1.60; $\frac{1}{2}$ bu. (8 lbs.), \$2.50; 1 bu. (16 lbs.), \$4.50.

PUTTING GREEN MIXTURE

HAVING specialized for over three-quarters of a century in all varieties of Grass Seeds, and having become familiar with the habits and characteristics of all cultivated grasses, we were prepared to develop the Mixture of Grasses herewith offered by us, after making a careful study of the requirements for producing the most substantial turf for Putting Greens.

The numerous testimonials we have received establishes the fact that our Mixture of Grasses will produce a thick, tough, beautiful green turf.

The varieties comprising this Mixture of Grasses are all the finest-bladed, low-growing and most hardy kinds, and will maintain their rich, velvety green color throughout the season. For a new green 100 feet square, use about 4 bushels (64 lbs.). Half this quantity of renovating.

$\frac{1}{2}$ lb., 30c; 1 lb., 50c; 5 lbs., \$2.25; $\frac{1}{2}$ bu. (8 lbs.), \$3.20; 1 bu. (16 lbs.), \$6.00.

GOLF LINKS MIXTURE

WE have given much attention to grasses for golf links. The mixture of grasses we offer below is composed of such varieties as will thrive here, and are the result of experiments conducted on our grounds, as well as careful observation for several years of the practical results obtained on those golf links, for which we have supplied the seed. We shall be glad to prescribe for whatever the requirements of the links may be; for poor lands or rich; high and dry, or low and wet.

Sow 4 bushels (64 lbs.), to the acre for Fairways and general purposes. Half this quantity for renovating.

Per lb., 30c; 5 lbs., \$1.35; $\frac{1}{2}$ bu. (8 lbs.), \$2.00; 1 bu. (16 lbs.), \$3.75.

Pulverized Sheep Manure and Pure Bone Meal are the Best Fertilizers for Lawns. See Fertilizers.

McCullough's Grass Seeds

We specialize in Grass Seeds of all kinds and for every purpose.



Kentucky Blue Grass

We expect to adhere closely to impossible to guarantee prices.

All orders will be filled at lowest market price on the day of receipt.

Postage Must be Added if Wanted by Mail. See Postal Rates, Second Page of Cover.

KENTUCKY BLUE GRASS

(*Poa Pratensis*)

ALSO known as June Grass, Green Grass, etc. This is rated as the finest permanent pasture grass. Especially suited to meadows and rich lands. It is the grass of the famous and fertile limestone soils of Kentucky, and is no less a favorite all through the Northern States. A perfect lawn grass. Sow 30 to 40 lbs. per acre for lawns; 2 bushels (28 lbs.) to the acre for pasture (14 lbs. per bushel).

Kentucky Blue Grass, Fancy Cleaned.

Per lb., .35c; 5 lbs., \$1.65; ½ bu. (7 lbs.), \$2.25; 1 bu. (14 lbs.), \$4.20.

Write for special prices on large quantities and other grades.

NOTE:—We wish to call attention to the fact that Cincinnati is the leading market in the world for **Kentucky Blue Grass Seed**. We export many carloads annually, the words "McCullough's" and "Kentucky Blue Grass" being very familiar to the principal Seed dealers of the world.

ORCHARD GRASS

(*Dactylis Glomerata*)

ROUGH Cocksfoot. *Perennial*. Height, 3 feet. It blossoms about the same time as Red Clover, making it, on that account, a desirable mixture with that plant. It is exceedingly palatable to stock of all kinds, and its powers of enduring the cropping of cattle commend it as one of the very best pasture grasses. Sow 25 to 35 lbs. to the acre. (14 lbs. per bushel). Market price.

RED TOP GRASS

(*Agrostis Palustris* or *Alba*)

HERD'S Grass, Quick Grass. *Perennial*. Height 1 to 2 feet. Valuable either for lawn mixtures, mixing in hay, or permanent pasture grasses; succeeds almost everywhere, but reaches its highest state of perfection in a moist, rich soil, in which it attains a height of 2 to 2½ feet.

Fancy Red Top Pure Seed.

Weight, about 30 lbs. per bushel. Sow 10 to 12 lbs. per acre. Per lb., .30c; 10 lbs., \$2.50; per 100 lbs., \$22.00.

Choice Red Top Seed in Chaff

Sow, if alone, 40 to 50 lbs. per acre. (14 lbs. per bushel). Per lb., .20c; 7 lbs., \$1.25; per bu. of 14 lbs., \$2.25.

Canadian Blue Grass (*Poa Compressa*)

ALSO called Flat-Stemmed Poa, Flat-Stalked Meadow Grass. Grows a foot or more high. Recommended for horses, cows and sheep. Thrives well on clay. Sow 30 to 40 lbs. per acre. Market price.



Orchard Grass

Pacey's Improved Short Rye Grass

SIMILAR to Perennial Rye Grass, but does not grow so tall, consequently is superior for lawn purposes. (24 lbs. per bushel). Sow if alone 50 to 60 lbs. per acre.

Per lb., .25c; 12 lbs., \$2.25; per bushel of 24 lbs., \$4.00.

Perennial or English Rye Grass

(*Lolium Perenne*)

IMPORTED English Blue Grass. Height, 15 to 24 inches. Considered invaluable for permanent pastures. It produces an abundance of remarkably fine foliage, tillers out close to the ground and soon forms a compact sward. After being cut it grows up in a very short time and remains bright and green throughout the season, consequently is well adapted for lawn mixtures. Valuable for shady places. Also a good variety for hay, if cut when in blossom, as it is then most nutritious. Sow, if alone, 50 to 60 lbs. per acre. (24 lbs. per bushel).

Per lb., .25c; 12 lbs., \$2.00; per bushel of 24 lbs., \$3.75.

Meadow Fescue (*Festuca Pratensis*)

(Erroneously called English Blue Grass).

HIGHLY valuable for permanent grass land. Does not, however, attain its full productive power till the second or third year. Relished by live stock, both in hay and permanent pasture and is one of the most desirable grasses for general culture. Sow 30 to 40 lbs. to the acre. (24 lbs. per bushel). This is the true Evergreen Grass of the South. Price on application.

Bermuda Grass (*Cynodon Dactylon*)

A VALUABLE grass for the south and for tropical climates; will not endure frost. Sow 10 to 15 lbs. per acre. Write for price.

Creeping Bent (*Agrostis Canina*)

ONLY obtainable in small quantities and in mixture with other grasses. Valuable for Putting Greens and Lawns. (12 lbs. per bushel). Price on application.

Crested Dogstail (*Cynosurus Crystatus*)

A excellent grass for hard, dry soils; valuable for pastures and lawns, as it is very hardy, tender, nutritious and relished by all stock. (21 lbs. per bushel). Sow, if alone, 30 to 35 lbs. per acre. *Perennial*. Height, 1 to 1½ feet.

Per lb., .60c; 10 lbs., \$5.50.

Impossible to quote firm prices on "Fancy Grass Seeds" at time of going to press.

Write for special prices on New Crop Seeds.

GRASS SEEDS—Continued

Fine-Leaved Sheep Fescue

(*Festuca Ovina Tenatifolia*)

SIMILAR to the Sheep Fescue, except that the leaves are much finer. Sow, if alone, 40 lbs. per acre. (14 lbs. per bushel). Perennial. Height varies from 8 to 24 inches. Write for price.

Hard Fescue (*Festuca Duriuscula*)

PERENNIAL. Height, 12 to 24 inches. Thrives well in dry situations. The herbage is decidedly tender, but the flower heads, when ripe, become hard. Sow, if alone, 30 to 35 lbs. per acre. (12 lbs. per bu.) Per lb., 40c; 10 lbs., \$3.50.

Italian Rye Grass (*Lolium Italicum*)

BIENNIAL. Height, 18 to 30 inches. As it is not perennial, it is not adapted for permanent pastures, but for one or two years hay it is unsurpassed. Sow, if alone, 45 to 50 lbs. per acre. (18 lbs. per bushel). Per lb., 25c; 10 lbs., \$2.00; 100 lbs., \$15.00.

Red Fescue or Chewings Fescue (*Festuca Rubra*)

A CREEPING-ROOTED species, forming a close and lasting turf and especially adapted for dry sandy soils. It resists extreme drought and thrives on poor soils; also valuable for shady places in lawns as well as for golf courses. 40 lbs. to the acre. (24 lbs. per bushel.) Per lb., 60c; 10 lbs., \$5.50.

Sheep Fescue (*Festuca Ovina*)

Perennial. Height varies from 6 to 20 inches. Grows naturally on light, dry, sandy soils. Sheep are very fond of it. (14 lbs. per bushel). Sow 30 to 35 lbs. per acre. Per lb., 50c; 10 lbs., \$4.50.

McCULLOUGH'S MIXED GRASSES For Meadows and Pastures

AFTER years of experimenting we have aided largely in establishing the fact that a thicker and more prolonged growth is produced by a mixture of several varieties than when only one or two are used. There are always certain Grasses that are especially adapted to certain kinds of soils, and these are so carefully combined in our mixtures that in our **Mixture for Permanent Pastures**, grasses will be found that mature at intervals during the season, thereby insuring continuous pasturage, while our **Mixture for Permanent Meadows** will furnish excellent hay as well as late pasturage.

We are prepared to furnish seeds adapted to all soils and all situations, and for all purposes, composed of Grasses for light, medium or heavy soils; by light soil we mean that which is more or less of a sandy or gravelly nature; the heavy, clay and heavy loams; while the medium is an intermediate between these two. A light, wet soil, with respect to the Grasses suited to it, may be considered same as to the heavy soils, and a dry, heavy soil, more as to light soils.

Our best mixture is made entirely with our choice re-cleaned seeds, while in our second quality we use the same seeds, but without re-cleaning, and will be equal to the qualities usually to be had on the market. Our mixtures will all have a uniform weight of 16 pounds to the bushel. Quantity to be used per acre, one and one-half to two bushels, and half this quantity for renovating. In ordering, always state the soil and position on which you wish to use it.

First Quality Mixtures

FOR MEADOWS

Per lb., 30c; 8 lbs., \$2.25; per bushel of 16 lbs., \$4.25.

FOR PERMANENT PASTURES

Per lb., 30c; 8 lbs., \$2.25; per bushel of 16 lbs., \$4.25.

FOR PASTURE AND HAY IN ORCHARD AND OTHER SHADY PLACES

Per lb., 30c; 8 lbs., \$2.25; per bushel of 16 lbs., \$4.25.

We supply **SECOND QUALITY MIXTURES** of any of the above at a reduction of 25c per bushel.

We specialize in Grass Seeds of all kinds and for every purpose.

For larger quantities—write for special prices.

Miscellaneous Farm Seeds

SOWING RAPE

AFORAGE plant of high feeding value. A rich, loamy soil is preferable, but it does well on sandy or stiff clays, and is excellent for sowing after a crop of wheat has been taken off. The plant is a rank grower and should have heavy manuring. It is excellent for fattening sheep and swine, produces an abundant flow of milk in cows, and is the ideal pasture for weaning lambs. Its value as sheep pasture has been demonstrated in every State in the Union, and it is recommended by authorities everywhere as of superior value for hogs, furnishing the finest pasturage, or can be fed after cutting. It can be sown for fall crop in July, August and September, and still later further South.

In a few weeks from the time of sowing, sheep, hogs or cattle can be turned on it. When on the Rape they should at all times have access to salt. When sown broadcast, use five to six pounds, and if in drills, two to three pounds, to the acre.

Per lb., 20c; 10 lbs., \$1.25.

Write for prices on **FALL BARLEY, WINTER TURF OATS, SEED WHEAT and SEED RYE.** Prices on cheaper grades given on application.

Sweet Vernal Grass

FOR a mixture with pasture Grasses it is valuable on account of its vernal growth, and also for continuing to throw up root foliage until late in the autumn. Its chief merit is its fragrant odor which the leaves emit when partially dry, thus sweetening hay. Sow 3 to 5 lbs. per acre with other Grasses.

True Perennial. (*Anthoxanthum Odoratum*). Market Price. **Annual.** (*Anthoxanthum Odoratum Puelli*). Much smaller than the perennial. Price on application.

Tall Meadow Oat Grass

(*Avena Elatior*)

A perennial. Has broad, flat leaves, and grows about 3 feet high; has an abundance of long, fibrous roots, penetrating deeply in the soil, enabling it to withstand drought and cold. Sow 25 to 30 lbs. per acre. Market Price.

Timothy (*Phleum Pratense*)

Herd's Grass. Cat's-tail Grass. This Grass stands at the head for meadows. Never use less than a peck to the acre, then up to one-half bushel, as to circumstances. Market Price.

Various Leaved Fescue

(*Festuca Heterophylla*)

A very early hardy perennial, 2 to 3 feet high, thriving best in cold, moist soils. Yields heavily and is valuable in grass mixtures for permanent meadows. It grows very well in the shade, and is highly recommended for shaded lawns and woodland parks. 40 lbs. to the acre. Price on application.

Wood Meadow Grass (*Poa Nemoralis*)

No grass is better adapted for pleasure grounds, particularly under trees, as it will not only grow in such places, but forms a fine sward where few other Grasses can exist. Sow 20 to 25 lbs. to the acre. Market Price.

We specialize in Grass Seeds of all kinds and for every purpose. For larger quantities—write for Special Prices

FOR MARSHY GROUNDS

Per lb., 30c; 8 lbs., \$2.25; per bushel of 16 lbs., \$4.25.

FOR SANDY AND ROCKY GROUNDS

Per lb., 30c; 8 lbs., \$2.25; per bushel of 16 lbs., \$4.25.

Postage must be added if wanted by mail. See Postal Rates, second page of cover.

VETCHES OR TARES

Sand, Hairy, or Winter Vetch. (*Vicia Villosa*.) Our stock of this is the true type, which will absolutely live throughout the winter, and buyers should beware when buying that they procure the right article, which is a small, round, black seed; this is far superior to Crimson Clover, as it never winter-kills.

Sow from August 1st to October 1st, broadcast, 1 to 1½ bushels per acre, to which we suggest adding half a bushel of winter rye or wheat. In the spring it can be plowed in as green manure, or when in flower cut for hay. All stock relish it keenly. (60 lbs. per bushel.) Market Price.



McCullough's High Grade Clover Seed

Where prices are given on Field Seeds they only represent market values at time of going to press. Purchasers of large quantities should write for latest prices. Grain bags, holding two bushels 45c each, extra. Postage must be added if wanted by mail.



View of a Field of Alfalfa Clover grown in territory contiguous to Cincinnati

Alfalfa or Lucerne (*Medicago Sativa*)

ALFALFA is one of the most profitable crops the dairyman or stock farmer can raise, due to the high yield of palatable hay which contains a large percentage of protein. Alfalfa as grown in the United States, yields more than twice the digestible nutriment that Red Clover does and more than three times the digestible protein to the acre. Alfalfa and corn make a perfectly balanced ration. Many farmers are using it in their rotation to take the place of Red Clover. This practice is satisfactory where the soil contains a large supply of lime and organic matter and the seed has been inoculated, or the land has been in Alfalfa previously.

Alfalfa is best adapted to steep limestone hillsides and gravelly river bottoms, where the water can get away from the roots. Will grow on acid soils providing the water is drained off and sufficient lime is added to correct the acidity.

Where land is being seeded to Alfalfa for the first time it will pay to inoculate the seed.

Sow in spring or fall at the rate of 15 to 20 lbs. per acre.

We offer American grown seed raised in the Northwest and West on non-irrigated land. It is free as possible from noxious weeds. (60 lbs. per bushel).

Price on application.



Montana Alfalfa

AHARDY variety from the non-irrigated or dry lands of eastern Montana, where the climate is severe. Under ordinary conditions the seed will serve all purposes where hardiness is required and we advise giving the "Montana" a trial wherever it has been difficult to grow other varieties. Sow in spring or fall at the rate of 15 to 20 lbs. per acre. We have secured a supply of strictly high quality seed.

Price on application.

Grimm Alfalfa

THIS variety of Alfalfa is being raised all over the United States. It seems to be much harder than common Alfalfa, which is due to the division of its root system, enabling it to withstand freezing and thawing weather, droughts and other hardships which the common alfalfa will not endure.

We have this season secured a supply of Genuine Seed of this variety, grown by specialists in northern Idaho, where the soil and climatic conditions are most favorable for its development, consequently there can be no comparison between the quality of the seed offered by us and that offered from other sources of supply. When comparing prices kindly bear this fact in mind. Sow in the spring or fall of year at the rate of 15 to 20 lbs. per acre.

Price on application.

Alsike or Swedish Clover

(*Trifolium Hybridum*)

THIS variety is perennial and on account of its fibrous root system does not winter-kill. Will grow well on poor soil and do better on moist land than any other variety of Clover, and is highly esteemed as pasturage for bees. Sow 6 to 8 lbs. per acre. Market Price.



White or Dutch Clover

(*Trifolium Repens*)

THIS variety thrives on nearly all soils; is a low close-growing Clover, and on account of its earliness and hardiness should be used in mixtures for permanent pastures and lawns. It is now being very successfully used by some Golf Clubs on Putting Greens. 70c per lb.; \$6.50 for 10 lbs.

Japan Clover (*Lespedeza Striata*)

THIS Clover is especially adapted for the South, because it occupies the same position in pasture mixtures for the South that White Clover does in the North. Will thrive on poor land, and, as it grows thickly, soon furnishes abundant pasturage. This Clover is a half-hardy annual, without any objectionable root system. Sow 15 to 20 lbs. per acre. (25 lbs. per bushel). Market Price.

Red Clover—Medium

(*Trifolium Pratense*)

SOW 10 to 12 pounds to the acre, according to quality of seed used and condition of the soil. In ordering, always state quality desired, otherwise will send the best. Market Price.

Red Clover—Sapling or Mammoth

(*Trifolium Pratense Perenne*)

Also called English Clover, Cow Grass, Perennial Red Clover. Sow 10 to 12 lbs. per acre. Market Price.

Crimson or Scarlet Clover

(*Trifolium Incarnatum*)

Crimson, Scarlet or Carnation Clover

AFIELD of this Clover in full bloom is a grand sight. This Clover grows about two feet high, makes good hay and is excellent for feeding green, the yield being immense, and after cutting it at once commences to grow again, and continues until freezing weather, but being an annual, dies after maturing its seed. Should be sown in August to October, also early spring. 12 to 15 lbs. per acre.

25c per lb.; \$2.25 for 10 lbs.



McCullough's High Grade Clover Seeds—Continued

Hubam Clover (Annual White Sweet Clover)

THE advantage of Hubam over other clovers is its remarkable vigor and its value as a hay, green manure and pasture crop.

It also affords splendid pasturage for bees, as it blossoms early and continues in blossom until the first frosts.

By its use, a full year is saved in the farm rotation.

It will grow on a wide variation of soils and under various climatic conditions, but thrives best in lime-stone soils that are not acid.

Hubam will not benefit the soil upon which it grows without inoculation, except on soil that has previously grown Alfalfa or Sweet Clover.

Hubam may be sown in our latitude about the first of April. If planted in drills 18 to 30 inches apart, use 2 to 4 pounds per acre. If sown broadcast, use 12 to 14 pounds per acre. May be sown in grain, but makes a better yield when sown alone.

Never sow unscarified Hubam Seed, as the germination is low, but when scarified will germinate as high as 90 per cent.

All of our Hubam Seed is scarified and quality is genuine.

Write for special prices and descriptive circular giving more detailed information.



Bokhara or Sweet Clover

SWEET Clover is a biennial plant, which closely resembles Alfalfa. It requires practically the same soil treatment as Alfalfa, but will grow under a wider variation of soil conditions than Alfalfa.

White Flowered. (*Melilotus Alba*). A biennial plant and bears a close resemblance to Alfalfa, but is larger and coarser. It will make an excellent growth on any lime lands and stiffest clays, or any soils so hard and barren that they will sustain no other vegetation.

The roots are very long, penetrating the soil to a depth of three to four feet, are large, and being fleshy, decay more rapidly than alfalfa roots, hence their nitrogen becomes more quickly available for other crops. As they decay at the end of the second season, there is a good supply of humus.

White Flowered; Hulled Seed, Scarified. Market Price.

Yellow Flowered. (*Melilotus Officialis*). Biennial. It resembles the White Sweet Clover, but blooms about three weeks earlier, produces finer stalks and does not grow as tall. It makes first-class hay and excellent pasture for cattle and sheep. It will grow on any kind of soil, and, being deep rooted, remains green in the driest season. It should be sown by bee keepers in localities where Alfalfa is not grown as it is one of the best honey plants.

Yellow Flowered; Hulled Seed, Scarified. Market Price.

Unhulled Seed of both varieties is very slow to germinate. Unhulled Seed (30 lbs. per bushel). Hulled Seed (60 lbs. per bushel).

NOTE:—We have installed scarifying machinery, and our Hulled Sweet Clover is all scarified, which increases the germination 40 to 50 per cent.



LARGER CROPS IN FIELD and GARDEN If You Use Nitragin

Alfalfa, clovers, soybeans, vetches, peas, beans, cowpeas, peanuts and other legumes should always be inoculated with Nitragin. The lack of necessary bacteria in the soil is often the cause of a poor legume crop—a weak start—or a total failure.

Nitragin now comes in **Bushel sizes instead of acre sizes**. This means that it costs you less per acre than inferior imitations. If you sow 12 pounds of seed to the acre it will only cost you 20 cents for your Nitragin. It means that

Your Dollar Goes Further With NITRAGIN

Nitragin is an old, reliable inoculator. At the low price of 20 to 33 cents per acre you cannot afford to sow legumes without it. Nitragin is put up in the modern ventilated package; in a rich, soil-like packing medium. The contents are always fresh, living bacteria to feed your plants. Easy to use. Sent by mail or express prepaid.

1/4 Bushel size.....	40c	1 Bushel size.....	\$1.00
1/2 Bushel size.....	60c	5 Bushel size.....	4.75
Garden size (peas, beans, sweet peas—three in one package).....	20c		

STATE WHAT CROP YOU WANT THE NITRAGIN FOR



INCREASE YOUR YIELD OF ALFALFA, CLOVERS, VETCH, COW PEAS, SOY BEANS and other

Legumes by inoculating your seed with

Edwards Legume Bacteria

ALL the requirements for successful inoculation are met in the cultures of EDWARDS' LEGUME BACTERIA.

Cultures are made and kept in stock for legume crops as follows: Alfalfa, Sweet Clover, Red Clover, Alsike Clover, Crimson Clover, White Dutch Clover, Field or Garden Beans, Lima Beans, Soja Beans, Field or Garden Peas, Sweet Peas, Vetches, Cowpeas. Of this list the same culture can be used for either Alfalfa or Sweet Clover, and likewise, the same culture can be used for Red, Alsike, Crimson and Dutch Clovers. All the

other crops require a different culture for each as named. The entire culture may be used on less than the amount of seed for which it is made without harm to the seed. The cultures are good for six months after leaving the laboratory. The cultures are sent by mail or express prepaid, with full directions for use.

EDWARDS' LEGUME BACTERIA cultures are made in three sizes:

To inoculate 30 pounds of seed.....	\$0.60
To inoculate 60 pounds of seed.....	1.00
To inoculate 300 pounds of seed.....	4.50

Trial package for Beans, Garden Peas and Sweet Peas, 30 cents each.

Directions for use on each package.

In ordering, be sure to name crop to be inoculated.

Hardy Herbaceous Perennial Plants

THE steadily increasing demand for hardy plants has induced us to give them more attention and to increase our stock considerably. For such of our customers who are not acquainted with the different varieties we shall be pleased to make suitable selections of the most desirable species, that once planted, with very little care, will keep the garden gay with flowers from the time frost leaves the ground until late in autumn.

Cannot accept orders for Hardy Perennial Plants totaling less than one dollar. Six plants of a kind at dozen rates.

When ordering Plants to be sent via Parcel Post, always add 5c per plant or 30c per dozen for postage.

ACHILLEA (Milfoil or Yarrow)

Boule De Neige. (Ball of Snow). An improved variety bearing pure white flowers of perfect form all summer. Fine for cut flowers.
35c each; 3 for 60c; \$2.00 per dozen; by mail 40c each.

ACONITUM (Monkshood)

SUMMER and late autumn-flowering plants with bold spikes of hood-shaped flowers thriving in either sun or shade. The roots are poisonous and should not be planted where the tubers might be mistaken for vegetables.

Fischeri. A dwarf variety with pale blue flowers. 18 inches. September.
50c each; 3 for \$1.05; \$3.50 per dozen; by mail 55c each.

AGROSTEMMA (Rose Campion)

Erect growing plants with silvery foliage and showy flowers during June and July.

Coronaria. (Mullein Pink). Bright rosy-crimson flowers; 2½ to 3 feet.
35c each; 3 for 60c; \$2.00 per dozen; by mail 40c each.

AJUGA (Bugle)

Reptans Rubra. A fine plant for the rockery and for shady situations. Large spikes of purplish blue flowers in May.
40c each; 3 for 75c; \$2.50 per dozen; by mail 45c each.

ALYSSUM (Madwort)

Saxatile Compactum. (Basket of Gold, Gold Tuft, Rockmadwort.) A fine plant for the rockery or border, grows 1 foot high and produces broad flat heads of yellow flowers in May.
40c each; 3 for 75c; \$2.50 per dozen; by mail, 45c each.

ANCHUSA ITALICA

Dropmore Variety. Remarkable for its free and continual flowering all summer and the beautiful gentian-blue of its flowers; grows about five feet high.
45c each; 3 for 90c; \$3.00 per dozen; by mail, 50c each

ANTHEMIS TINCTORIA

The hardy *Marguerites* are among the most satisfactory summer-flowering perennials, growing about 15 inches high; large golden yellow flowers.
35c each; 3 for 60c; \$2.00 per dozen; by mail, 40c each.

AQUILEGIA (Columbine)

CHARMING hardy plants, with distinct clear-cut foliage, bearing in countless numbers through May and June exquisite clear blue, white, rose, yellow, purple and striped blossoms. They thrive well with ordinary garden culture, but do best in partially shaded nooks.

Chrysantha. (Golden Columbine.) Golden yellow flowers with long spurs.
40c each; 3 for 75c; \$2.50 per dozen; by mail, 45c each.

Coerulea. Flowers often three inches in diameter; the outer sepals deep lilac or blue, petals white, the deep blue spur tipped green.
45c each; 3 for 90c; \$3.00 per dozen; by mail, 50c each.

Long Spurred Hybrids. Beautiful variations from the standard type. 45c each; 3 for 90c; \$3.00 per dozen; by mail, 50c each.

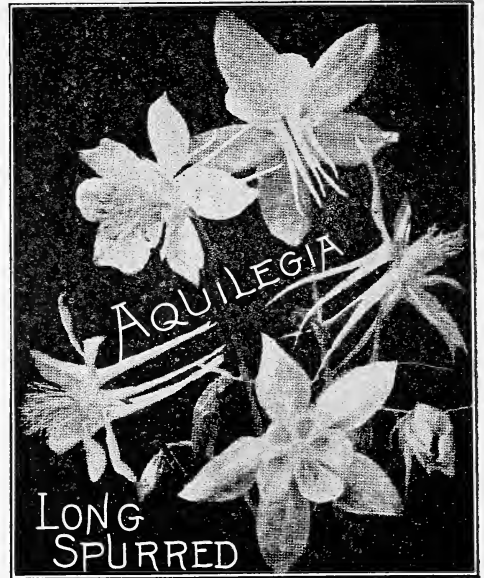
Wayside Pink. A beautiful strain of nothing but clear pink colors. We do not think that they can be surpassed.
45c each; 3 for 90c; \$3.00 per dozen; by mail, 50c each.

ARABIS (Rock Cress)

Alpina. A desirable early spring flowering plant, adapted for edging and the rock garden, but does equally well in the border, forming a dense carpet, completely covered with pure white flowers, which last a long time in bloom.
45c each; 3 for 90c; \$3.00 per dozen; by mail, 50c each.

ARTEMISIA

Lactiflora. A tall-growing plant of fine foliage and heads of small white flowers in August and September, which fill the garden with fragrance.
35c each; 3 for 60c; \$2.00 per dozen; by mail, 40c each.



ARMERIA (Sea Pink or Thrift)

ATTRACTIVE dwarf plants that will succeed in any soil, forming evergreen tufts of bright green foliage, from which innumerable flowers appear in dense heads, on stiff wiry stems, from 9 to 12 inches high. They flower more or less continuously from early spring until late in the fall. Very useful in the rockery.

Lauchearia Rosea. Bright rose.
45c each; 3 for 90c; \$3.00 per dozen; by mail, 50c each.

ASCLEPIAS (Butterfly Weed)

Showy native plants about 2½ feet high, blooming during July and August.

Tuberosa. Brilliant orange-colored flowers.
40c each; 3 for 75c; \$2.50 per dozen; by mail, 45c each.

ASTERS (Michaelmas Daisies or Starworts)

THESE are among the showiest of our late flowering hardy plants, giving a wealth of bloom at a season when most other hardy flowers are past, and for the best effect should be planted in masses of one color. The hardy sorts are entirely distinct from Annual Asters, being smaller in bloom but produced in greater quantity.

Feltham Blue. A pretty aniline blue; very free bloomer.
40c each; 3 for 75c; \$2.50 per dozen; by mail, 45c each.

Novae-Angliae Roseum Superbum. Color almost red and a profuse bloomer.
45c each; 3 for 90c; \$3.00 per dozen; by mail, 50c each.

Novi-Belgii Climax. The plant is of strong vigorous habit, over 5 feet high, with pyramidal shaped flower stems filled with light lavender-blue flowers, each 1½ inches or more in diameter. August to October.
50c each; 3 for \$1.05; \$3.50 per dozen; by mail, 55c each.

Doris. (New). Pure white, rather dwarf. One of the new Asters lately introduced from Holland.
45c each; 3 for 90c; \$3.00 per dozen; by mail, 50c each.

Mauve Cushion. This new Japanese Aster is a distinct species. The flowers of delicate mauve, with silvery white reflection, are borne on plants rarely exceeding 9 inches in height. The blooms are at their best in November.
50c each; 3 for \$1.05; \$3.50 per dozen; by mail, 55c each.

Alpinus. Dwarf Alpine Aster. Indispensable for the rockery or edge of hardy borders; grows 6 to 10 inches high and bears large bluish purple flowers in May and June.
45c each; 3 for 90c; \$3.00 per dozen; by mail, 50c each.

BOLTONIA (False Chamomile)

TALL growing, showy plants, with flowers resembling hardy Asters, appearing in September.

Latisquama. Pink, tinted lavender; six feet.
35c each; 3 for 60c; \$2.00 per dozen; by mail, 40c each.

CALLIRHOE (Poppy Mallow)

Involucrata. A showy trailing plant with finely divided foliage and rosy-crimson flowers with white center; blooms all summer.
45c each; 3 for 90c; \$3.00 per dozen; by mail, 50c each.

We do not guarantee or replace plants, shrubs or trees at prices quoted.

HARDY HERBACEOUS PLANTS—Continued

CANTERBURY BELLS

THESE imposing herbaceous hardy biennials are profusely covered with large bell-shaped flowers; extremely showy in shrubberies and mixed borders.

CUP AND SAUCER VARIETIES. (*Campanula Calycanthema*). Large semi-double flowers, each resembling a cup and saucer.

Pink. Beautiful variety with charming pink flowers.

35c each; 3 for 60c; \$2.00 per dozen; by mail, 40c each.

White. Similar to the preceding, but the flowers are white.

35c each; 3 for 60c; \$2.00 per dozen; by mail, 40c each.

Blue. Beautiful light blue flowers.

35c each; 3 for 60c; \$2.00 per dozen; by mail, 40c each.

CERASTIUM (Snow in Summer)

Tomentosum. Suitable for the rockery or for covering dry, sunny spots. Low growing plant with silvery foliage and white flowers in June.

40c each; 3 for 75c; \$2.50 per dozen; by mail, 45c each.

COREOPSIS

Lanceolata Grandiflora. A beautiful hardy border plant; grows eighteen inches high and produces its bright golden yellow flowers in great profusion the entire season.

35c each; 3 for 60c; \$2.00 per dozen; by mail, 40c each.

DELPHINIUM (Perennial Larkspur)

THESE are deservedly popular. They are perfectly hardy and will establish themselves in almost any garden soil, but respond quickly to liberal treatment. Will begin blooming about the middle of June. If stalks are cut off as soon as flowers fade, they will continue blooming all summer.

Belladonna Hybrids. The freest and most continuous bloomer of all. The clear turquoise-blue flowers are not surpassed by any; 3 feet.

40c each; 3 for 75c; \$2.50 per dozen; by mail, 45c each.

Bellamosa. A dark blue of the type of Belladonna with the color of the old Formosum variety, but not liable to mildew like the latter and of stronger growth.

40c each; 3 for 75c; \$2.50 per dozen; by mail, 45c each.

Giant Hybrids. Unquestionably the finest strain of mixed hybrids ever offered. The plants are of strong, vigorous habit, with large flowers on spikes two feet and over long.

45c each; 3 for 90c; \$3.00 per dozen; by mail, 50c each.

Chinensis. A pretty dwarf species, with fine feathery foliage and intense gentian-blue flowers in open panicles.

40c each; 3 for 75c; \$2.50 per dozen; by mail, 45c each.

Chinensis Alba. A pure white form of the above.

40c each; 3 for 75c; \$2.50 per dozen; by mail, 45c each.

ERYNGIUM (Sea Holly)

FINELY cut, spiny foliage and thistle-like heads of flowers of a beautiful steel blue. Very decorative in the hardy border, and useful for dry bouquets in winter.

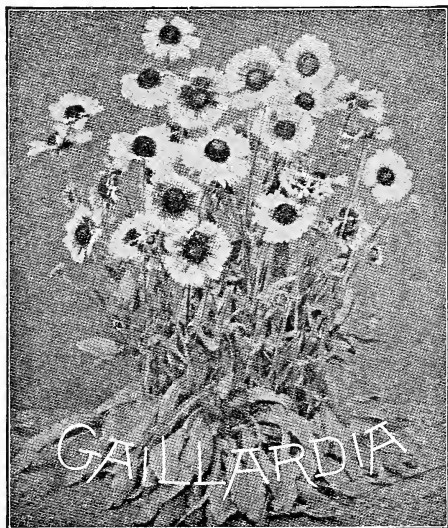
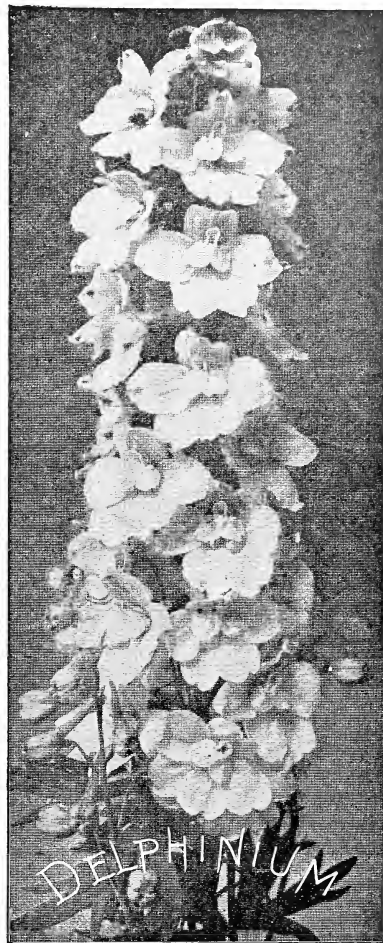
Amethystinum. (Syn. *Oliverianum*.) The true blue Thistle, with amethyst stems and bracts.

45c each; 3 for 90c; \$3.00 per dozen; by mail, 50c each.

EUPATORIUM

Ageratoides. (Thorough Wort). Grows 3 to 3½ feet high with small white flowers in dense heads; August and September.

40c each; 3 for 75c; \$2.50 per dozen; by mail, 45c each.



GAILLARDIA (Blanket Flower)

Grandiflora. Beginning to flower in June, they continue one mass of bloom the entire summer. Flowers three inches in diameter; center dark reddish brown; petals orange to crimson.

40c each; 3 for 75c; \$2.50 per dozen; by mail, 45c each.

GRASSES, Ornamental. (See page 25.)

GYPSOPHILA (Baby's Breath)

Paniculata. Loose, feathery sprays of white flowers, making a mist-like effect in August and September; fine for bouquets.

35c each; 3 for 60c; \$2.00 per dozen; by mail, 40c each.

Repens. An elegant trailing plant for the rockery, with clouds of small white flowers in July and August.

40c each; 3 for 75c; \$2.50 per dozen; by mail, 45c each.

HELENIUM (Sneezewort)

HANDSOME plants, allied to the sunflowers. Of the easiest culture, forming dense masses of blooms in late summer and autumn.

Autumnale Superbum. Broad heads of deep golden yellow flowers in late summer. Grows 5 to 6 feet high.

45c each; 3 for 90c; \$3.00 per dozen; by mail, 50c each.

Autumnale Rubrum. A splendid new variety; deep ox-blood-red, changing to terra-cotta. 5 to 6 feet. September.

45c each; 3 for 90c; \$3.00 per dozen; by mail, 50c each.

HELIOPSIS (Orange Sunflower)

Pitcheriana. Very similar to a small sunflower, but blooming earlier; deep golden yellow; all summer, June till frost; three feet high.

40c each; 3 for 75c; \$2.50 per dozen; by mail, 45c each.

HARDY HERBACEOUS PLANTS—Continued

HEMEROCALLIS (Yellow Day Lily)

Lily-like plants, which flower in greatest profusion during the summer.

Flava. The best known variety, very fragrant, deep lemon-yellow flowers in June and July.

40c each; 3 for 75c; \$2.50 per dozen; by mail, 45c each.

Dr. Regel. Handsome, rich orange yellow flowers in May. Very fragrant. Fine for cutting. 1½ feet.

40c each; 3 for 75c; \$2.50 per dozen; by mail, 45c each.

Thunbergii. Bears rich, buttercup-yellow, funnel-shaped flowers in July and August.

40c each; 3 for 75c; \$2.50 per dozen; by mail, 45c each.

HIBISCUS (Mallow)

These are a mass of bloom during the entire summer, when they produce large flowers in gorgeous colors.

Mallow Marvels, Giant-flowering. Flowers of enormous size, frequently 10 to 12 inches in diameter, have been developed. They appear to be equally at home in all positions, having the same vigor in dry and wet ground, and are perfectly hardy. They grow from 5 to 8 feet high, and are very floriferous, blooming from early in July until late in autumn. We offer three distinct colors—red, pink and white—strong roots.

45c each; 3 for 90c; \$3.00 per dozen; by mail, 50c each.

Crimson Eye. Blooms of purest white with deep crimson eye; flowering in July; 4 feet.

40c each; 3 for 75c; \$2.50 per dozen; by mail, 45c each.

HOLLYHOCK

FOR planting in rows or in groups on the lawn, or for interspersing among shrubbery, they are invaluable. They require rich, deep soil, well drained.

Newport Pink. Finest pure pink, double flowering variety.

40c each; 3 for 75c; \$2.50 per dozen; by mail, 45c each.

Double White, Double Rose, Double Yellow, Double Red, Double Mixed.

40c each; 3 for 75c; \$2.50 per dozen; by mail, 45c each.

Single Mixed. A wide range of colors.

35c each; 3 for 60c; \$2.00 per dozen; by mail, 40c each.

IBERIS (Hardy Candytuft)

Sempervirens. Low growing, with evergreen foliage. In spring and early summer, is completely covered with dense heads of pure white flowers.

45c each; 3 for 90c; \$3.00 per dozen; by mail, 50c each.

LIBERTY IRIS (Iris Germanica)

(Flag Iris) The "Fleur-de-Lis" of France

THE Liberty Iris is one of the most desirable May flowering plants. The flowers are of large size and exquisite colors.

For the best results plant in a well-drained sunny position, barely covering the roots. Avoid fresh manure in preparing your border.

Argus. This variety is of solid color, standards and falls are dark purple; distinct and rich in effect.

25c each; \$2.50 per dozen; \$15.00 per 100.

Caprice. A semi-early variety of vigorous growth, with very large flowers of dark violet-rose. Coloring is distinct and fine. Height, 24 inches.

25c each; \$2.50 per dozen; \$15.00 per 100.

Celeste. Delicately beautiful flowers, self-colored pale sky-blue. Very free bloomer.

25c each; \$2.50 per dozen; \$15.00 per 100.

Chelles. One of the best with bright golden yellow standards; falls bright red-purple, beautifully reticulated.

25c each; \$2.50 per dozen; \$15.00 per 100.

Darius. Standards rich golden yellow; falls reddish violet reticulated on white and margined primrose; style arms golden yellow; beard orange. Height, 20 inches.

25c each; \$2.50 per dozen; \$15.00 per 100.

Etta. Very large flower, with all divisions very long and broad. Standards pale lemon-yellow; falls deeper shade of lemon-yellow, washed with gold at base. Height, 18 inches.

30c each; \$3.00 per dozen; \$18.00 per 100.

Florentine. An early variety with large, fragrant white flowers with very slight lilac reflections. Height, 29 inches.

25c each; \$2.50 per dozen; \$15.00 per 100.

Gerda. Large flowers with creamy yellow standards; falls darker, veined yellow and with a greenish, metallic lustre.

25c each; \$2.50 per dozen; \$15.00 per 100.

Gypsy Queen. Standards old gold, shaded smoked pearl; falls black maroon, reticulated light yellow; late bloomer. Height, 24 inches.

15c each; \$1.50 per dozen; \$10.00 per 100.

Her Majesty. This variety is one of the prettiest of the deep pink sorts; of robust growth and free-flowering. Height, 30 inches.

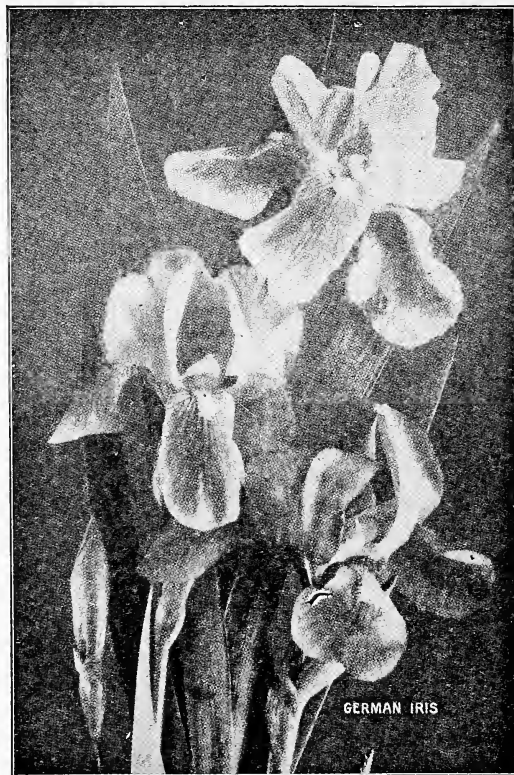
25c each; \$2.50 per dozen; \$15.00 per 100.

Honorabilis. A semi-dwarf variety; standards golden yellow; falls rich mahogany brown. Height, 18 inches.

15c each; \$1.50 per dozen; \$10.00 per 100.

Innocenza. Pure white flowers, with golden yellow crest; style arms white. The only coloring on the divisions is a very slight veining of violet and brown at base of falls. A delicate and lovely little flower and late bloomer. Height, 26 inches.

25c each; \$2.50 per dozen; \$15.00 per 100.



GERMAN IRIS

Liberty Iris (Iris Germanica)

Jacquiesiana. Standards fawn, brightened at base with gold; falls velvety reddish violet, almost black, of wonderful substance and depth of color; style arms gold and fawn. Height, 30 inches.

15c each; \$1.50 per dozen; \$10.00 per 100.

Jeanne D'Arc. A lovely Iris with large flowers. Semi-early. Standards very large, ruffled, spreading after the manner of the Japanese, white, with a border delicately pencilled bright lilac; falls pure white, bordered lilac at base; style arms tipped and mid-ribbed deep bright lilac. Height 31 inches.

30c each; \$3.00 per dozen; \$18.00 per 100.

Massasoit. Standards are a distinct shade of metallic Venetian blue; falls deeper blue, velvety and rich. A beautiful flower of fine texture and great substance. All divisions broad and full.

50c each; \$5.00 per dozen.

Othello. A handsome variety. Standards rich blue; falls deep, dark, velvety purple; style arms purple-blue. All divisions long and narrow. Height, 30 inches.

25c each; \$2.50 per dozen; \$15.00 per 100.

Pallida Dalmatica. This is one of the finest Irises grown, having enormous sweet-scented flowers. Standards lavender; falls lavender, shaded blue. Exquisite in every way. Unequalled for massing and fine for cutting. Height, 40 to 48 inches.

20c each; \$2.00 per dozen; \$12.00 per 100.

Pallida Mandraliscae. An early, tall growing variety, with large handsome flowers of rich, lavender purple. Height, 42 inches.

30c each; \$3.00 per dozen; \$18.00 per 100.

Princess of Teck. Coloring is very soft and rich. Standards lilac-white, suffused at base with sun-flower yellow; falls a peculiar shade of deep, purplish rose, beautifully netted on white over a great part of the surface.

25c each; \$2.50 per dozen; \$15.00 per 100.

Queen of May. The coloring of this semi-early variety is unique, as both falls and standards are self-colored beautiful bright rose, slightly lilacish, of robust growth and free flowering. Height 32 inches.

15c each; \$1.50 per dozen; \$10.00 per 100.

Rhein Nixe. This charming Iris has very large pure white standards and the falls are rich, raspberry purple, with a narrow but distinct white edge. Fine for massing. Height, 36 inches.

45c each; \$4.50 per dozen.

Rubella. A splendid royal purple Iris, the color paler in the standards, falls very velvety with paler middle line, broadly veined with white at base. Good form and large flower with broad divisions. Height, 36 inches.

25c each; \$2.50 per dozen; \$15.00 per 100.

Walhall. Standards light lavender; falls wine-red. A strong grower with large flowers. Height, 30 inches.

15c each; \$1.50 per dozen; \$10.00 per 100.

We do not guarantee or replace Plants, Shrubs or Trees, at prices quoted.

HARDY HERBACEOUS PLANTS—Continued

JAPANESE IRIS (*Iris Kaempferi*)

Named Varieties

THEY are most effective when planted in groups and thrive best in a moist soil. The flowers are of immense size, from six to eight inches in diameter, and of the most beautiful and delicate shades. They are perfectly hardy, flowering in great profusion during June and July.

- Sunrise, No. 3.** White petals heavily veined dark purple, yellow throat, guard petals violet, edged white, petaloides dark blue, feather white.
Amour, No. 4. Petals light lavender veined black purple, yellow throat, guard petals almost black, edged white, petaloides black purple with double feathered edges.
Golden Sun No. 5. Dark crimson mauve with yellow veins, guard petals light plum, petaloides light lavender.
Bandai, No. 9. Deep blue petals with a white halo, veined white.
Sunset, No. 12. Petals royal purple with bright yellow center and yellow veins.
Nippon, No. 17. Petals deep lavender-blue with yellow blotches, petaloides violet.
Hawaii, No. 21. Yellow petals with dark blue halo, shaded velvety purple.
Angelus, No. 26. Petals pure white, veined pale blue, petaloides lavender.
Etna, No. 27. Petals dark blue, veined white.
Africa, No. 34. Petals dark claret overlaid with blue, yellow veins.
Superba, No. 76. Dark garnet petals, veined white.
Shinto, No. 89. Petals bright crimson-purple with yellow throat.
 Prices of the above named varieties 50c each; \$5.00 per dozen.
 If wanted by mail, add 5c each, 30c per dozen for postage.
Finest Mixed (Our Selection). Our mixed varieties embrace a wide range of colors and markings 35c each; \$3.50 per dozen.
 If wanted by mail, add 5c each, 30c per dozen for postage.

LIATRIS (Blazing Star, or Gay Feather)

Showy native plants, producing their large spikes of flowers from July to September.

Pycnostacha. Spikes of light, rosy purple flowers; five feet.
 45c each; 3 for 90c; \$3.00 per dozen; by mail, 50c each.

LINUM (Flax)

Perenne. A fine plant for the border or rockery; grows 2 feet high, with light, graceful foliage and large blue flowers all summer.
 40c each; 3 for 75c; \$2.50 per dozen; by mail, 45c each.

LUPINUS (Lupine)

THEY grow about three feet high, producing large spikes of flowers, latter part of May and early June.

Polyphyllus. Clear blue.
 50c each; 3 for \$1.05; \$3.50 per dozen; by mail, 55c each.

Albus. A white variety of above.
 50c each; 3 for \$1.05; \$3.50 per dozen; by mail, 55c each.

LYCHNIS

Chalcedonica. A desirable plant, growing two to three feet high; flowers brilliant orange scarlet.
 35c each; 3 for 60c; \$2.00 per dozen; by mail, 40c each.

LYTHRUM

Roseum Superbum. (Rose Loose Strife.) A strong growing plant, three to four feet high, producing large spikes of rose colored flowers from July to September.
 40c each; 3 for 75c; \$2.50 per dozen; by mail, 45c each.



Japanese Iris

MERTENSIA (Blue Bells)

Virginica. An early spring-flowering plant, growing about one to one and one half feet high, with drooping panicles of handsome, light blue flowers, fading to clear pink; one of the most interesting spring flowers, blooming in May and June.
 40c each; 3 for 75c; \$2.50 per dozen; by mail, 45c each.

MONARDA (Bergamot)

SHOWY plants, growing from two to three feet high, succeeding in any soil or position, with aromatic foliage, and producing their bright flowers during July and August.
Didyma. Cambridge Scarlet. (Oswego Tea.) Flowers bright scarlet.
 40c each; 3 for 75c; \$2.50 per dozen; by mail, 45c each.

MYOSOTIS

Alpestris. (Alpine Forget-Me-Not.) Splendid for naturalizing on edge of ponds and streams; also for beds, borders, and rockeries. 45c each; 3 for 90c; \$3.00 per doz.; by mail, 50c each.

OENOTHERA (Evening Primrose)

ELEGANT subjects for growing in an exposed, sunny position, either in the border, or on the rockery, blooming all summer.
Missouriensis. Large; golden yellow flowers.
 40c each; 3 for 75c; \$2.50 per dozen; by mail, 45c each.
Speciosa. Pure white flowers, 3 inches across; 18 inches.
 40c each; 3 for 75c; \$2.50 per dozen; by mail, 45c each.

PACHYSANDRA

Terminalis. A trailing plant 6 to 8 inches high, forming broad mats of bright, glossy green foliage and small spikes of white flowers during May and June. A ground cover, which will grow in all shady situations and the only plant which will thrive under pine trees.
 40c each; 3 for 75c; \$2.50 per dozen; by mail, 45c each.

PENTSTEMON

(Beard Tongue)

Barbatus Torreyi. Spikes of brilliant scarlet flowers from June to August. Grows 3 to 4 feet high.
 40c each; 3 for 75c; \$2.50 per dozen; by mail, 45c each.

DOUBLE HERBACEOUS PEONIES. See page 24 for full description and prices.



DOUBLE HERBACEOUS PEONIES

HARDY HERBACEOUS PLANTS—Continued

DOUBLE HERBACEOUS PEONIES

MAGNIFICENT, hardy plants, almost rivaling the rose in perfume, brilliancy, color and perfection of bloom. They are perfectly hardy, require little or no care, and produce larger and finer blooms when well established.

This season we offer a superb assortment of double flowering Peonies. These will be furnished in divisions of 3 to 5 eyes.

Peonies should be planted in the fall for best results. If planted during the months of September, October and early November, they are almost certain to bloom the following season.

Achille. An erect, tall growing, free blooming sort with shell-pink fragrant flowers fading to lilac-white. Blooms range from medium to large and of compact rose type. Early mid-season. **50c each; \$5.00 per dozen.**

Agnes Mary Kelway. Large, fragrant flowers of crown type. Guards and crown deep violet-rose, collar cream-white. Within this collar a crown of same color as guards. Free bloomer in clusters; tall and vigorous grower; mid-season. **60c each; \$6.00 per dozen.**

Alice Crousse. Flowers very large, fragrant and of double rose type. Color is light violet-rose. A strong, upright grower and free bloomer. Early. **50c each; \$5.00 per dozen.**

Baroness Schroeder. This is one of the finest Peonies in existence. A late flowering variety of rose type with fragrant white flowers suffused with blendings of gold, heliotrope or pink. **70c each; \$7.00 per dozen.**

Duchesse De Nemours. Of medium height, strong grower and free bloomer. The fragrant flowers have a pure white crown, with sulphur-white collar without any crimson flecks. Early. **60c each; \$6.00 per dozen.**

Edulis Superba. This is usually called the Decoration Day Peony as it is generally in full bloom by that time. Flowers are a beautiful, bright, clear mauve-pink with silvery reflex. Strong upright grower and free bloomer. **50c each; \$5.00 per dozen.**

Felix Crousse. Large, full, brilliant red flowers of globular form, bomb type and fragrant. Strong vigorous grower of medium height and free bloomer in clusters. Late mid-season. **60c each; \$6.00 per dozen.**

Festiva Maxima. Flowers very large, globular and of rose type. Petals very broad. Pure white center usually flecked crimson; outer petals sometimes pale lilac-white on first opening. Early and most popular white for cut flowers. **50c each; \$5.00 per dozen.**

Fragrans. A late blooming variety of bomb type. Compact, full flowers; color solferino-red with slight silvery reflex; strong, vigorous grower and free bloomer in clusters. **50c each; \$5.00 per dozen.**

Livingstone. Large, compact flower of rose type. Pale lilac-rose, tipped silver, center petals flaked carmine. Both buds and flowers are large and beautiful. An upright, erect grower and late bloomer. Fine cut flower variety. **50c each; \$5.00 per dozen.**

Louis Van Houtte. An old favorite of semi-rose type; late mid-season. Fine, shapely bloom; medium to large flower; color bright violaceous-red of dazzling effect. **40c each; \$4.00 per dozen.**

Marie Calot. Flowers are lilac-white, fading to milk-white, golden yellow stamens and short, narrow petals around the collar. Of rose type, late blooming and fragrant. **60c each; \$6.00 per dozen.**

Marie Mannoir. Flowers very dark crimson, fragrant, globular and of rose type. A strong, erect grower of medium height, blooming freely in mid-season. **70c each; \$7.00 per dozen.**

Rubra Superba. A very late, large flowering variety of rose type. Flowers are deep, brilliant rose-carmine or crimson and very fragrant. Considered the best late crimson. **50c each; \$5.00 per dozen.**

Queen Victoria. An early mid-season sort of bomb type. Considered the best every day white. In the bud state has a faint blush tint, opening white, center petals tipped with carmine. Large, full, compact blooms. **50c each; \$5.00 per dozen.**

Unnamed Varieties. Colors, red, pink and white. **25c each; \$2.50 per dozen.**

PHLOXES of Sorts

Amoena. This variety grows about 4 inches high, forming a carpet of foliage, which in early spring is a sheet of bright pink flowers. **40c each; 3 for 75c; \$2.50 per dozen; by mail, 45c each.**

Divaricata Canadensis. This variety is worthy of extensive planting, as it commences to bloom early in April and continues through May, with large, fragrant lavender flowers, on stems 10 inches high. **45c each; 3 for 90c; \$3.00 per dozen; by mail, 50c each.**

Subulata. (Moss or Mountain Pink.) An early spring-flowering type, with pretty moss-like evergreen foliage, which, during the flowering season, is hidden under the masses of bloom. An excellent plant for the rocky, the border, and invaluable for carpeting the ground or covering graves. **Alba.** Pure White. **Rosea.** Bright Rose. **40c each; 3 for 75c; \$2.50 per dozen; by mail, 45c each.**

Suffruticosa. **Miss Lingard.** This early flowering variety grows about 2 feet high and blooms from May to October. Flowers white with pale pink eye, long graceful panicles. **50c each; 3 for \$1.05; \$3.50 per dozen; by mail, 55c each.**

HARDY PHLOX (Phlox Decussata)

PROBABLY the most satisfactory of all perennials, and a good space, in proportion to the size of the garden, should always be given to these plants. These are justly esteemed as the finest herbaceous plants. They are of dwarf habit, perfectly hardy, of very easy culture, and yield a profusion of bright showy bloom. They are hardly equaled by any other hardy plant for the decoration of the garden.

We offer the following collection of extra choice varieties. **40c each; 3 of a kind for 75c; \$2.50 per dozen.**

If wanted by mail, add **5c** each, **30c** per dozen, for postage.

Athis. Very tall; fine salmon.

Bridesmaid. White with crimson eye.

Champs Elysees. Fine, rich crimson.

Eclairer. Bright carmine with light halo. Large flower.

Europa. White with large red center, extra size truss.

F. G. Von Lassburg. Splendid pure white; very large.

La Vague. Mauve with red eye.

Prof. Virchow. Bright carmine, overlaid with orange-scarlet.

Rheinlander. Beautiful salmon-pink, with flowers and trusses of immense size.

R. P. Struthers. Bright rosy carmine, with claret-red eye.

Rynstroom. Lively rose-pink, much like Paul Neyron rose.

Siebold. Vivid orange-scarlet.

Any of the above varieties—

40c each; 3 of a kind for 75c; \$2.50 per dozen.

If wanted by mail, add **5c** each; **30c** per dozen, for postage.

PHYSOSTEGIA (False Dragonhead)

Virginia. Forms large clumps 3 to 4 feet high, bearing long spikes of delicate pink flowers, tubular in form. July and August. **40c each; 3 for 75c; \$2.50 per dozen; by mail, 45c each.**

Virginia Alba. Pure white. **40c each; 3 for 75c; \$2.50 per dozen; by mail, 45c each.**

PLATYCODON (Balloon Flower or Japanese Bell Flower)

The Platycodons are closely allied to the Campanulas, and form neat, branched bushes of upright habit.

Grandiflorum. Deep blue, cupped, star-shaped flowers, one and one-half feet. **40c each; 3 for 75c; \$2.50 per dozen; by mail, 45c each.**

Album. A white-flowered form of the above. **40c each; 3 for 75c; \$2.50 per dozen; by mail, 45c each.**

Mariesi. Deep blue, bell-shaped flowers, nearly three inches across on one-foot-high plants. **40c each; 3 for 75c; \$2.50 per dozen; by mail, 45c each.**

POPPIES, ORIENTAL

(Papaver Orientale)

FOR a gorgeous display of rich and brilliant coloring, nothing equals them during their period of flowering in May and June. After flowering, the plants die back, usually re-appearing along in early September, or as soon as the weather gets cool. During this resting period, care should be taken in cultivating the beds, that the roots are not disturbed.

Apricot Queen. Large, apricot colored flowers.

Beauty of Livermore. Crimson, with black blotch, fine large flowers.

Mrs. Perry. Orange-apricot; very fine.

Any of the above Varieties—

45c each; 3 of a kind for 90c; \$3.00 per dozen; by mail, 50c each.

Mixed Varieties—

40c each; 3 for 75c; \$2.50 per dozen; by mail 45c each.

PYRETHRUM

Uliginosum. (Giant Daisy.) Grows four to five feet high, and is covered with large, white, daisy-like flowers three inches in diameter from July to September. **40c each; 3 for 75c; \$2.50 per dozen; by mail, 45c each.**

RUDBECKIA (Cone Flower)

A VARIETY of these will furnish a supply of cut flowers from early July until September. They are extremely hardy, doing well with every one. They could be termed "a city garden perennial," doing so well with little attention.

Golden Glow. Double canary yellow flowers; six feet; August. **35c each; 3 for 60c; \$2.00 per dozen; by mail, 40c each.**

Newmanni. Single dark orange, with deep purple cone center; three feet high; flowers from July to September. **40c each; 3 for 75c; \$2.50 per dozen; by mail, 45c each.**

Purpurea. (Giant Purple Cone Flower.) The flowers remain in perfect condition on the plants for weeks at a time. In fact, we do not know of any other perennial where the flowers last so long in perfect condition. Flowers from July to September; two and one-half feet high. **45c each; 3 for 90c; \$3.00 per dozen; by mail, 50c each.**

HARDY HERBACEOUS PLANTS—Continued

SALVIA

Azurea. Grows two to three feet high and produces pretty sky-blue flowers in great profusion during August and September.
40c each; 3 for 75c; \$2.50 per dozen; by mail, 45c each.

SCABIOSA

Japonica. They last a long time when picked and placed in water. Bears lavender-blue flowers on long stems from July to September.
45c each; 3 for 90c; \$3.00 per dozen; by mail, 50c each.

SEDUM (Stone Crop)

Acre. (Golden Moss.) Much used for covering graves; foliage green, flowers bright yellow.
35c each; 3 for 60c; \$2.00 per dozen; by mail, 40c each.

Spectabilis. Erect growing; height 18 inches with broad, light-green foliage and immense heads of handsome, showy, rose-colored flowers.
45c each; 3 for 90c; \$3.00 per dozen; by mail, 50c each.

Spectabilis Brilliant. Similar to the above with bright, amaranth-red flowers.
45c each; 3 for 90c; \$3.00 per dozen; by mail, 50c each.

SHASTA DAISY

Large, snowy-white flowers, in bloom continuously throughout the summer and fall.

Alaska. A decided improvement on the original, very free-flowering, with blooms $4\frac{1}{2}$ to 5 inches across, of pure, glistening white.
45c each; 3 for 90c; \$3.00 per dozen; by mail, 50c each.

King Edward. Very large flowers; plant of vigorous growth.
45c each; 3 for 90c; \$3.00 per dozen; by mail, 50c each.

SIDALCEA

ERECT-GROWING, more or less branching plants, producing their showy flowers during June and July. They will succeed in any garden soil in a sunny position.

Rosy Gem. Pretty, bright rose-colored flowers, 2 to 3 feet.
35c each; 3 for 60c; \$2.00 per dozen; by mail, 40c each.

STATICE (Great Sea Lavender)

Latifolia. Immense heads, 2 to 3 feet across; small, blue flowers from June to September, which last for months if cut and dried.
45c each; 3 for 90c; \$3.00 per dozen; by mail, 50c each.

STOKESIA (Cornflower or Stokes' Aster)

Cyanea. Produces showy, aster-like, deep blue flowers which measure from 4 to 5 inches across. 18 to 24 inches high, blooming freely from July until frost.
40c each; 3 for 75c; \$2.50 per dozen; by mail, 45c each.

SWEET WILLIAM (Dianthus Barbatus)

Well known hardy plant. We offer a superb strain of mixed single and double-flowering sorts.

35c each; 3 for 60c; \$2.00 per dozen; by mail, 40c each.

Newport Pink. Salmon or watermelon-pink flowers.
40c each; 3 for 75c; \$2.50 per dozen; by mail, 45c each.

TRITOMA (Red Hot Poker, Flame Flower or Torch Lily)

Pfitzerii. (The Everblooming Flame Flower.) In bloom from August to November, a rich orange-scarlet, producing a grand effect, either planted singly in the border or in masses.

50c each; 3 for \$1.05; \$3.50 per dozen; by mail, 55c each.

VALERIANA

Coccinea. Showy heads of reddish flowers, from June to October. Height, 2 feet.

45c each; 3 for 90c; \$3.00 per dozen; by mail, 50c each.

Officinalis. (Hardy Garden Heliotrope.) Produces showy heads of rose-tinted white flowers during June and July, with strong heliotrope odor; 3 to 4 feet.

50c each; 3 for \$1.05; \$3.50 per dozen; by mail, 55c each.

VERONICA (Speedwell)

Longifolia Subsessilis. A pretty species with blue flowers, produced on spikes a foot long, continuing in bloom the entire summer and fall.

45c each; 3 for 90c; \$3.00 per dozen; by mail, 50c each.

Rupestris. A fine rock plant growing 3 to 4 inches high; thickly matted deep green foliage, hidden in spring under a cloud of bright blue flowers.

50c each; 3 for \$1.05; \$3.50 per dozen; by mail, 55c each.

Spicata. An elegant border plant, growing about 1 $\frac{1}{2}$ feet high, producing long spikes of bright blue flowers.

40c each; 3 for 75c; \$2.50 per dozen; by mail, 45c each.

VINCA MINOR (Periwinkle or Trailing Myrtle)

Dwarf evergreen trailing plant, is used for carpeting the ground where it is too shady for other plants to thrive.

40c each; 3 for 75c; \$2.50 per dozen; by mail, 45c each.



Rudbeckia Purpurea

YUCCA FILAMENTOSA (Adam's Needle)

A HARDY ornamental foliage and evergreen plant with long, narrow leaves that are bright green the whole year round. The flowers are white, produced on long spikes.

45c each; 3 for 90c; \$3.00 per dozen; by mail, 50c each.

ORNAMENTAL GRASSES

Eulalia Gracillima. (Japan Rush.) The most beautiful of all the Eulalias, with narrow, graceful foliage, entirely green without variegation, except that the mid-rib is of a silver sheen.

Eulalia Japonica Variegata. Leaves striped white and green longitudinally.

Eulalia Zebrina. (Zebra Grass.) A peculiar variegated grass, growing six feet high. The variegation is unlike that of any other plant, being across the leaf in regular bands, dark green and light.

The above varieties—

40c each; 3 of a kind 75c; \$2.50 per dozen; by mail, 45c each.

Hedge Plants

CALIFORNIA PRIVET. (Ligustrum Ovalifolium.) Its foliage is a rich dark green and is nearly evergreen, remaining on the plant until mid-winter. It is of free growth and succeeds under the most adverse conditions, such as under dense shade of trees. The most advantageous manner of planting is in double rows, the two rows being about 8 inches apart. The plants should be set 12 inches apart in the row, alternating the plants. In order to secure a dense hedge from the base up, the plants should be severely pruned the first two seasons.

12 to 15 inches, \$0.75 per dozen; \$5.00 per 100

15 to 18 inches, 0.90 per dozen; 6.00 per 100

18 to 24 inches, 1.00 per dozen; 7.00 per 100

24 to 30 inches, 1.20 per dozen; 8.00 per 100

AMOR RIVER PRIVET, North. (Ligustrum Amurense.)

18 to 24 inches, \$2.00 per dozen; \$14.00 per 100

24 to 36 inches, 3.00 per dozen; 20.00 per 100

IBOTA PRIVET. (Japanese Privet.)

18 to 24 inches, \$2.00 per dozen; \$14.00 per 100

24 to 36 inches, 2.25 per dozen; 16.00 per 100

REGEL'S PRIVET. (Ligustrum Regelianum.)

18 to 24 inches, \$4.25 per dozen; \$30.00 per 100

Ornamental Flowering Shrubs



Callicarpa, Purpurea

ALMOND, DOUBLE FLOWERING. A desirable class of early flowering shrubs; erect, slender branches, covered with small double flowers in May.

Pink Flowering.....\$1.00 each; \$10.00 per dozen.

White Flowering.....1.00 each; 10.00 per dozen.

ALTHEA. (Rose of Sharon.) The Altheas are among the most valuable of our hardy shrubs on account of their late season of blooming, which is from August to October. Are also extensively used as hedge plants.

Boule-De-Feu. Double red.....60c each; \$6.00 per dozen.

Grandiflora Superba. Double bluish white, shaded carmine. 60c each; \$6.00 per dozen.

Jeanne D'Arc. Double white.....60c each; \$6.00 per dozen.

Meehani. Beautiful variegated foliage with satiny, lavender colored, single flowers, open and free blooming. 75c each; \$7.50 per dozen.

Single Rose, White and Purple.....60c each; \$6.00 per dozen.

Double Rose, White and Purple.....60c each; \$6.00 per dozen.

AMORPHA FRUTICOSA. (False Indigo.) A handsome shrub growing to 8 feet tall. Foliage bright green and feathery. Indigo-colored flowers borne on stiff stems. May to June. 75c each; \$7.50 per dozen.

ARALIA SPINOSA. (Hercules Club.) A large shrub with large, bright green leaves. Branches are slender and bear large trusses of creamy flowers, followed by dark purple berries in September.....\$1.00 each; \$10.00 per dozen.

BERBERIS, Thunbergii. (Japanese Barberry.) One of the most beautiful shrubs either for hedging or general purposes. It is of a neat, compact growth and the foliage is beautiful at all times, and in the fall turns to a most brilliant crimson color. The plant is covered with bright scarlet berries all the fall and winter. It seldom grows over four feet high.

12 to 18 inches, 45c each; \$4.50 per dozen.

18 to 24 inches, 75c each; 7.50 per dozen.

24 to 30 inches, 90c each; 9.00 per dozen.

BUDDLEYA. (Butterfly Shrub or Summer Lilac.) **Variabilis Magnifica.** Flowers continuously all season. The flower racemes are composed of many little blossoms in the shape and color of lilacs.

60c each; \$6.00 per dozen.

SHRUBS are as much a part of the garden as the lawn or flower borders, and a well arranged planting presents an attractive appearance throughout the entire year.

Shrubs have many uses—as a background to a flower border, for hiding an unsightly building, fence or foundation, or they may be planted in a mixed shrubby border, in which case those of short, dense growth should be planted along the front of the border, graduating to the tall-growing kinds at the back.

Thorough preparation of the soil by spading, and the addition of a liberal quantity of sheep or stable manure or bone meal will be well repaid by strong, vigorous, healthy growth. In planting, care should be taken not to overcrowd, allowing sufficient room for future development, unless an immediate effect is wanted—in which case they may be planted closer and some of them moved when necessary. The majority of the dwarf growing kinds may be set about three feet apart, the tall, strong growers about five feet apart.

Our Shrubs are transplanted every two or three years and are furnished with plenty of fibrous roots and should not be compared to stock that is never moved from the cutting beds until sold.

Stocks of **ORNAMENTAL FLOWERING SHRUBS** have become greatly depleted in the last few years, consequently it is no longer possible to offer two or more sizes, except in a few instances. Our prices contemplate furnishing the largest sizes now obtainable.

We do not guarantee or replace plants, shrubs or trees, at prices quoted.

CALYCANTHUS FLORIDUS. (Sweet-Scented Shrub.) Flowers fragrant, double and of a chocolate color. Blooms in April. 75c each; \$7.50 per dozen.

CALLICARPA, PURPUREA. A low growing shrub rarely exceeding three feet in height. The numerous curving branches are covered in August with clusters of insignificant pink flowers; these are followed in September by large masses of bright, glossy, violet-purple berries, borne in clusters from the axil of every leaf, remaining on the plant until mid-winter. For planting in borders or in clumps on the lawn these fall berried plants are useful and attractive.

60c each; \$6.00 per dozen.

CERCIS CANADENSIS. (Judas Tree or Red Bud.) Very showy and beautiful when in bloom. All the branches and twigs are covered with a mass of small pink flowers early in the spring, before the leaves appear.

60c each; \$6.00 per dozen.

CLETHRA ALNIFOLIA. (Sweet Pepper Bush.) Dark green foliage and upright spikes of creamy white, fragrant flowers in August. (See cut.).....60c each; \$6.00 per dozen.



Clethra Alnifolia

CORCHORUS. (Kerria.) Globe Flower or Japanese Rose. **Japonica.** A shrub four to six feet tall. Native of Japan. Leaves bright green, fading in autumn to tones of yellow. Flowers numerous, bright yellow, large and showy. A charming old-fashioned plant. June to October. 75c each; \$7.50 per doz.

CYDONIA JAPONICA. (Japan Quince.) This shrub is covered with dazzling scarlet flowers in early spring, followed by small, fragrant quince shaped fruit. 75c each; \$7.50 per doz.

White Kerria. (See Rhodotypos.)

We do not guarantee or replace Plants, Shrubs or Trees at prices quoted.

ORNAMENTAL FLOWERING SHRUBS—Continued

CORNUS FLORIDA. (White Flowering Dogwood.) The flowers, produced in April before the leaves appear, are from three to three and one-half inches in diameter, white and very showy. They begin to appear as the Magnolia flowers are fading, and are invaluable for maintaining a succession of bloom. Foliage grayish green, glossy and handsome, and in the autumn turns to a deep red; one of the most showy flowering trees. (See cut.).....**75c each; \$7.50 per dozen.**

CORNUS FLORIDA RUBRA. (Red Flowering Dogwood.) A rare variety, similar to the common type, except in color of the flowers, which are rich rosy red. The two varieties make a fine contrast. April.....**\$3.00 each; \$30.00 per dozen.**

CORNUS MASCULA. (Cornelian Cherry.) A small tree-like shrub, producing early in spring, before the leaves appear, clusters of bright, yellow flowers, which are followed by red berries.....**75c each; \$7.50 per dozen.**

CORNUS SIBERICA. (Red Siberian Dogwood.) A tall shrub with bright, coral-red branches, making them very conspicuous in winter.....**75c each; \$7.50 per dozen.**

CORNUS STOLONIFERO. (Red Osier Cornel.) A spreading shrub with beautiful, reddish-purple branches. Foliage dark green above and paler beneath. Flowers white, followed by white berries.....**75c each; \$7.50 per dozen.**

CRAB. (Bechtel's Double Flowering.) Most beautiful of all the flowering Crabs; hardy. Trees are covered in early spring with large, beautiful, double, fragrant flowers, resembling small roses of a delicate pink. 3 to 4 feet.
\$1.25 each; \$12.50 per dozen.

DESMODIUM PENDULIFLORUM. A shrub-like plant that dies to the ground in winter, but comes up vigorously in spring. Bears during September sprays of rose-colored flowers.
65c each; \$6.50 per dozen.

DEUTZIA CRENATA FLORA PLENA. Flowers double white, tinged with pink.....**75c each; \$7.50 per dozen.**

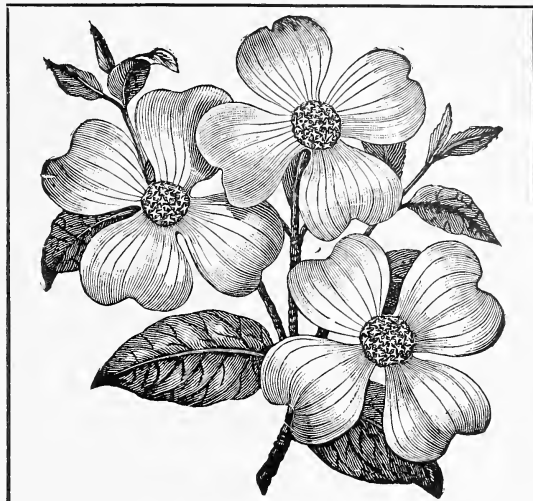
DEUTZIA GRACILIS. A dwarf bush, covered with spikes of pure white flowers in early summer.
75c each; \$7.50 per dozen.

DEUTZIA LEMOINEI. Habit dwarf, flowers white. One and one half to two feet.....**60c each; \$6.00 per dozen.**

DEUTZIA PRIDE OF ROCHESTER. Large double white flowers, slightly tinted with rose....**60c each; \$6.00 per dozen.**

ELDER, GOLDEN. (Sambucus.) Golden yellow foliage.
60c each; \$6.00 per dozen.

ELEAGNUS LONGIPES. Nearly evergreen; foliage silvered on the under surface. Yellowish flowers in May, followed by scarlet-yellow berries during summer.
75c each; \$7.50 per dozen.



Cornus Florida

EUONYMUS ELATUS. (Winged Burning Bush.) A handsome shrub with bright green oval leaves and broad corky winged branches. The leaves change in the fall to brilliant crimson. This shrub grows to a height of 6 to 8 feet and makes a conspicuous display of color in the fall. Fine for specimen planting or massing...**\$1.00 each; \$10.00 per dozen.**

FORSYTHIA FORTUNEI. (Golden Bell.) Upright growth and bright yellow flowers in April. **75c each; \$7.50 per dozen.**

FORSYTHIA SUSPENS. (Weeping Golden Bell.) Willow growth and yellow flowers.....**75c each; \$7.50 per dozen.**

FORSYTHIA VIRIDISSIMA. (Golden Bell.) Erect growth and spreading branches; flowers bright yellow.
75c each; \$7.50 per dozen.

HIPPOPHAE RHAMNOIDES. (Sea Buckthorn.) A large shrub with spiny branches. Foliage is gray green above and silvery beneath; flowers yellow, produced in early spring. Berries orange red, ripening in fall. **90c each; \$9.00 per dozen.**

HYDRANGEA ARBORESCENS STERILIS. (Snowball Hydrangea.) Snowy white blooms; will flower for fully three months; a very showy variety, excellent for borders.
18 to 24 inches; **60c each, \$6.00 per dozen.**
2 to 3 feet, **90c each; \$9.00 per dozen.**

HYDRANGEA PANICULATA

GRANDIFLORA. The flowers which are borne in dense pyramidal panicles in the greatest profusion, are white when they first open, but gradually change to rose and remain in good condition for weeks. (See cut.) 18 to 24 inches, **75c each; \$7.50 per dozen.** 2 to 3 feet, **90c each; \$9.00 per dozen.**

HYDRANGEA PANICULATA

GRANDIFLORA. Standard or Tree-Shaped Plants. These are four and five years old, trained to tree shape with about three feet of straight stem and nicely shaped heads. Four to five feet, **\$2.00 each; \$20.00 per dozen.**



Hydrangea Paniculata Grandiflora

ORNAMENTAL FLOWERING SHRUBS—Continued

HYPERICUM AUREUM. (Golden Hypericum.) A dwarf shrub growing to about 3 feet. Foliage bluish green above and paler beneath. Flowers yellow, nearly 2 inches across. Excellent for massing in front of taller shrubs. July and August..... **75c each; \$7.50 per dozen.**

ILEX VERTICILLATA. (Black Alder or Winterberry.) This fine shrub is famous for its sprays of scarlet berries which are much used for decorating at Christmas time. Bears white flowers in June. **75c each; \$7.50 per dozen.**

LILACS. (True Syringa.) (See cut.) **Purple.** (Syringa Vulgaris.) The common purple species, and one of the best. **75c each; \$7.50 per dozen.**

White. (Syringa Vulgaris Alba.) Flowers pure white, very fragrant. **75c each; \$7.50 per dozen.**

Price of any of the following named Lilacs.

Fine plants, 2 to 3 feet..... **\$1.00 each; \$10.00 per dozen.**

Fine plants, 3 to 4 feet..... **\$1.25 each; \$12.50 per dozen.**

Charles X. Rapid grower, reddish purple flowers.

Madame Lemoine. Double white flowers.

Michael Buchner. Double pale lilac.

LONICERA. (Bush or Upright Honeysuckle.) Handsome upright shrubs. They thrive in almost any soil.

Ledebouri. Very distinct, producing red flowers in May. **60c each; \$6.00 per dozen.**

Morrowi. A handsome Japanese variety with white flowers during May, but especially valuable for its bright red fruit during the summer and autumn months. **75c each; \$7.50 per dozen.**

Tartarica. (Tartarian Honeysuckle.) A large shrub with numerous upright or spreading branches. Flowers borne in great profusion in late spring. Fruit red or orange, ripening in summer. Red and white. **75c each; \$7.50 per dozen.**

PRIVET. See Hedge Plants.

PHILADELPHUS OR SYRINGA. (Mock Orange or Orange Blossoms.) A shrub that can always be depended upon to give splendid satisfaction. No insects bother it, and in May and June the bushes are literally covered with flowers.

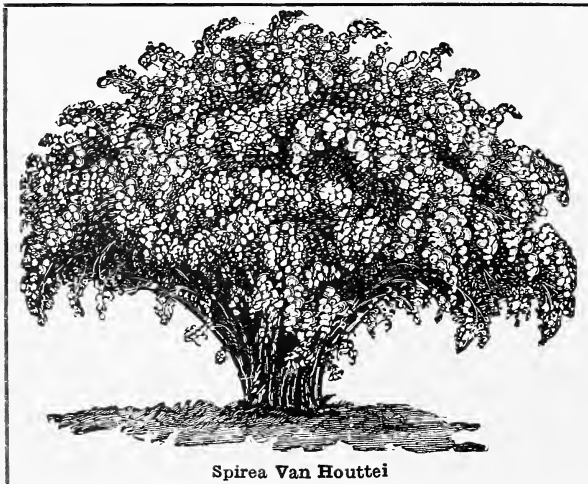
Coronarius. (Garland Syringa.) A fine old form, 8 to 10 feet tall, that blooms in May. Its large white flowers are borne in graceful sprays and are delightfully scented. **75c each; \$7.50 per dozen.**

Grandiflorus. (Large-flowered Mock Orange.) Flowers are pure white and very large..... **75c each; \$7.50 per dozen.**

Aurea. (Golden Mock Orange.) Fine golden-yellow foliage, contrasting beautifully with the dark leaves of other shrubs. **75c each; \$7.50 per dozen.**

PRUNUS PISSARDI. (Purple Leaved Plum.) One of the best of the small red or purple leaved trees, holding much of its color through the summer. Flowers small and pinkish white..... **75c each; \$7.50 per dozen.**

RHODOTYPOS. **Kerrioides.** (White Kerria.) Handsome foliage and large single flowers in the latter part of May, succeeded by numerous black berries. **75c each; \$7.50 per dozen.**



Spirea Van Houttei



Lilac

RHUS COTINUS. (Purple Fringe, or Smoke Tree.) A low, shrubby tree, covered in midsummer with large clusters of feathery flowers, giving the appearance of a cloud of smoke or mist..... **75c each; \$7.50 per dozen.**

RHUS TYPHINA. (Staghorn Sumac.) This variety will thrive in dry soil, growing to a considerable height. Leaves are dark green, turning to scarlet, purple and orange in the fall. The crimson fruits remain on all winter. **60c each; \$6.00 per dozen.**

ROBINIA HISPIDA. (Rose Acacia.) A very handsome shrub. The leaves are similar to those of the Locust. In June and July long panicles of rose-colored flowers hang from the branches..... **60c each; \$6.00 per dozen.**

SAMBUCUS. **Aurea.** (Golden Elder.) Attractive golden foliage and desirable to mix with other shrubs. **60c each; \$6.00 per dozen.**

SPIREA. A large group of showy, free-flowering, hardy shrubs.

Anthony Waterer. Makes nice, round bushes, three feet high and wide; beginning to bloom in summer, continuing until fall. Rose red flowers in large, round clusters all over the bush. 12 to 15 inches. **65c each; \$6.50 per dozen.**

Billardii. Pink flowers in bloom nearly all summer. It is grand for planting in masses..... **60c each; \$6.00 per dozen.**

Callosa Alba. A white flowering variety of dwarf, bushy, symmetrical form. Blooms all summer. 18 to 24 inches. **90c each; \$9.00 per dozen.**

Van Houttei. (Improved Bridal Wreath.) This is without a doubt the most beautiful and useful of shrubs. Always effective if planted singly or in groups on the lawn, in front of the porch, in shrub borders or in a hedge. Handsome throughout the entire season, but when in flower it is a complete fountain of white bloom. Clusters of white flowers are set close along the drooping stems. (See cut.)

Two to three feet. **50c each; \$5.00 per dozen.**

Three to four feet. **65c each; \$6.50 per dozen.**

Prunifolia Fl. Pl. (Old Bridal Wreath.) Blooms in May, with pure white, double flowers. **75c each; \$7.50 per dozen.**

Reevesii Fl. Pl. Tall, with dark, bluish green foliage, and large, double, pure white flowers in May and June. **75c each; \$7.50 per dozen.**

Thunbergii. Of dwarf, graceful form. Branches slender and somewhat drooping; foliage narrow and yellowish green; flowers small, white, appearing early in spring. **75c each; \$7.50 per dozen.**

ORNAMENTAL FLOWERING SHRUBS—Continued

STEPHANANDRA FLEXUOSA. A low shrub, with numerous gracefully arching branches giving a spray-like effect. Foliage glossy green, changing to red and purple. Flowers ivory-white, produced in abundance. June.
75c each; \$7.50 per dozen.

SYMPHORICARPUS. Racemosus. (Snowberry.) A graceful shrub, three to five feet tall, with slender branches. Flowers white or pinkish, in loose racemes in summer. Berries white, produced in showy, profuse clusters, the branches bending under their weight. 75c each; \$7.50 per dozen.

SYMPHORICARPUS. Vulgaris. (Coral-Berry or Indian Currant.) A grand shrub, producing a wealth of red or purplish berries, which remain on the branches all winter. Flowers greenish red in summer. Berries coloring in early autumn, very showy. Does well in shade.
75c each; \$7.50 per dozen.

TAMARIX. Africana. (Tamarisk.) Strong, slender, tall growing, irregular shrubs, with feathery foliage and small, delicate pink flowers in May. 60c each; \$6.00 per dozen.

TAMARIX. Hispida Aestivalis. A graceful shrub with upright branches, flowers pink, appearing in July and August.
60c each; \$6.00 per dozen.

VIBURNUM. (Snowballs and High Bush Cranberry.) The Viburnums are one of the most useful shrubs, being very hardy and of good habit. They all have white flowers mostly on flat heads and with a few exceptions are noted for their handsome clusters of berries. (See cut).



Snowball

Lantana. (Wayfaring Tree.) This is especially suitable for dry situations and limestone soil. The large, white flower clusters open in May and June and are followed by red fruits, changing to black.
75c each; \$7.50 per doz.

Opulus. (High Bush Cranberry.) The white flowers in June are followed in autumn by bright scarlet berries, which are very attractive until late in winter.
90c each; \$9.00 per dozen.

Opulus Sterilis. (Guilder Rose or Snowball.) Of spreading habit, bearing flat clusters of single white flowers, which afterwards produce brilliant red berries which hang to the plant all winter; very decorative. 65c each; \$6.50 per dozen.

Plicatum. (Japan Snowball.) One of the choicest hardy shrubs, with healthy dark foliage; the perfect balls of pure white flowers are borne in great profusion in May.
90c each; \$9.00 per dozen.

Tomentosum. (Single Japan Snowball.) A handsome shrub with beautiful, dark green leaves. Flowers white, borne in flat clusters in May. In autumn, foliage turns to a rich crimson. 90c each; \$9.00 per dozen.

VITEX AGNUS-CASTUS. (Chaste Tree.) A tall-growing shrub with extremely showy, dark green, aromatic foliage. Flowers lilac, borne in dense, drooping clusters. A rare shrub and very ornamental for lawn planting. July and August.
50c each; \$5.00 per dozen.

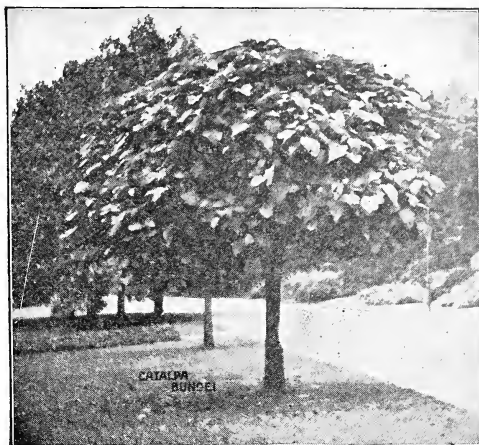
WEIGELIA. (Diervilla.) These shrubs bloom after the lilacs in June and July. Their large flowers are of wide trumpet-shape, colors from white to red, and borne in clusters thickly along the branches.

Candida. White flowering Weigelia, flowering throughout the summer. 75c each; \$7.50 per dozen.

Eva Rathke. The finest Weigelia in cultivation. Flowers continuously throughout the summer and autumn; of an entirely distinct color, being a rich, ruby carmine. Should be in garden. \$1.25 each; \$12.50 per dozen.

Rosea. A beautiful shrub, with rose-colored flowers in May and June. 75c each; \$7.50 per dozen.

Rosea Nana Variegata. A neat dwarf shrub, valuable for the clearly defined variegation of green, yellow and pink in its leaves; flowers delicate rose and pink; one of the finest variegated-leaved shrubs. 75c each; \$7.50 per dozen.



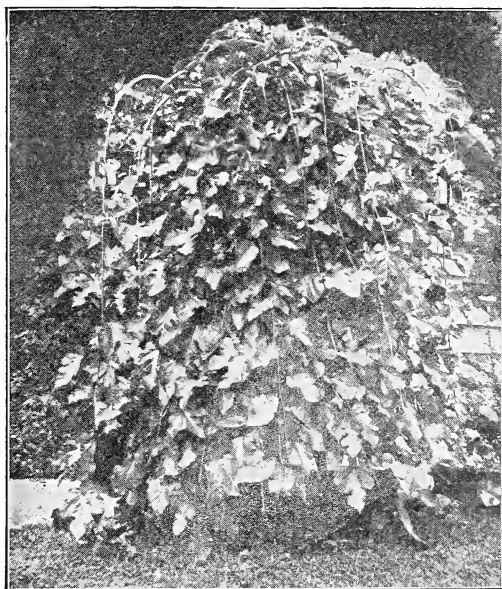
Catalpa Bungei

ORNAMENTAL TREES

CATALPA BUNGEI. (Umbrella Catalpa.) Grafted on stems 6 to 7 feet high, it makes an umbrella shaped top without pruning. Perfectly hardy. Leaves large, glossy, heart-shaped, deep green, lay like shingles on a roof, always making a symmetrical head. One of the most unique trees; desirable for lawns, park and demetery planting. 6 to 7 feet.

1 year heads, \$2.50 each. 2 year heads, \$3.75 each

MULBERRY, TEAS' WEEPING. The most graceful hardy weeping tree in existence. Forms a perfect-shaped head and the slender branches grow downward parallel with the stem, forming an umbrella-like shape. It takes the foremost place among weeping trees; has beautiful foliage and luscious fruit, is hardy, enduring the cold of the North and the heat of the South, safe and easy to transplant. Admirably adapted for ornamenting small or large grounds, or for cemetery planting.
2 year heads, \$3.75 each.



Weeping Mulberry

We do not guarantee or replace Plants, Shrubs or Trees at prices quoted.

Shade and Ornamental Trees

FOR LAWN, STREET AND FOREST PLANTING

ASH. American White. A handsome, hardy, broad-headed, quick growing shade tree. Valuable for park and street planting. 8 to 10 feet. **\$2.25 each; \$22.50 per dozen.**

ASH. European. Smaller in its habit of growth and more spreading than the American. 6 to 8 feet. **\$2.25 each; \$22.50 per dozen.**

BIRCH. American White. This is a valuable species with white bark. Very effective in landscape work. 6 to 8 feet. **\$3.00 each; \$30.00 per dozen.**

CATALPA SPECIOSA. A handsome, rapid growing tree, with large, bright green foliage. Valuable for lawn and street planting. 8 to 10 feet. **\$2.25 each; \$22.50 per dozen.**

CATALPA BUNGEI. (Umbrella Catalpa.) See "Ornamental Trees," page 29, for description. 6 to 7 feet. 1 year heads, **\$2.50 each; 2 year heads; \$3.75 each.**

ELM. American. A valuable tree for park, avenue and lawn planting. A hardy, rapid grower; resists drought well and is long lived. 8 to 10 feet. **\$2.00 each; \$20.00 per dozen.**

KOELREUTERIA PANICULATA. (Varnish Tree.) A rare tree growing 25 to 30 feet high bearing long clusters of golden yellow flowers in July. In autumn foliage colors to crimson and gold. 4 to 5 feet. **\$1.50 each; \$15.00 per dozen.**

LARCH. European. A pyramidal, cone-bearing tree, remarkable for its beautiful, light green feathery foliage in early spring. Fine tree for lawn and ornamental planting. 6 to 8 feet. **\$1.75 each; \$17.50 per dozen.**

LINDEN. American. A rapid growing tree with large leaves and fragrant flowers. Extensively used as a lawn tree, also for park and street planting. 8 to 10 feet. **\$3.75 each; \$37.50 per dozen.**

LINDEN. European. This is the broad-leaved Linden of European plantations and probably the largest. 8 to 10 feet. **\$3.00 each; \$30.00 per dozen.**

LIQUIDAMBER. (Sweet Gum.) A very ornamental tree and beautiful at every stage. Splendidly adapted for street and park planting. 4 to 5 feet..... **\$2.25 each; \$22.50 per dozen.**

MAPLE. Norway. A large, handsome tree with a compact, rounded head of spreading branches. One of the best trees for lawn, park, street or cemetery planting. 8 to 10 feet. **\$4.50 each; \$45.00 per dozen.**

MAPLE. Rock or Sugar. An excellent shade tree of upright, dense growth. Grows to a large size and is long lived. 8 to 10 feet..... **\$3.00 each; \$30.00 per dozen.**

MAPLE. Silver or Soft. Has wide, slender, spreading branches and thrives almost anywhere. 8 to 10 feet..... **\$2.00 each; \$20.00 per dozen.**
10 to 12 feet..... **\$2.25 each; \$22.50 per dozen.**

OAK. Red. A beautiful tree of rapid growth, growing into a large, majestic tree, with broad, round head, the foliage turning dark red in fall. 6 to 8 feet.... **\$3.00 each; \$30.00 per dozen.**

OAK. Scarlet. A noble tree with gradually spreading branches, which form a rather open head. Leaves turn scarlet in fall. 6 to 8 feet..... **\$3.75 each; \$37.50 per dozen.**

OAK. Pin. A handsome tree, especially when young. Tree is fibrous rooted, transplants well and grows rapidly. Foliage turns bright red in fall. 6 to 8 feet. **\$3.75 each; \$37.50 per dozen.**

POPLAR. Carolina. One of the surest and most rapid growing trees. The leaves are glossy and fresh looking. Valuable for quick effects. 8 to 10 feet. **\$1.50 each; \$15.00 per dozen.**

POPLAR. Bolleana. Its habit of growth is broader than the Lombardy. Tall growing with cottony leaves. 8 to 10 feet..... **\$1.50 each; \$15.00 per dozen.**

POPLAR. Lombardy. With age this tree becomes picturesque. 8 to 10 feet..... **\$1.25 each; \$12.50 per dozen.**
10 to 12 feet..... **\$1.50 each; \$15.00 per dozen.**



Rock or Sugar Maple

SALISBURIA. (Maiden Hair or Ginkgo.) A tall, sparsely branched, usually slender tree, with leaves similar in shape to the Maiden Hair Fern. Especially valuable for solitary planting to secure picturesque effects. 6 to 8 feet. **\$2.50 each; \$25.00 per dozen.**

SYCAMORE. Platanus Orientalis. (Oriental Plane.) This is among our largest and tallest growing trees. Very hardy and does well in moist places. Excellent for street, park and lawn planting. Thrives well in smoky cities, making it a good tree for city planting. 8 to 10 feet. **\$2.00 each; \$20.00 per dozen.**

SYCAMORE. Platanus Occidental. (American Sycamore, Buttonwood.) Similar to the Oriental Sycamore in general habit of growth, but more susceptible as to location and sheds its leaves earlier in the fall. 8 to 10 feet. **\$2.00 each; \$20.00 per dozen.**

TULIP TREE. (Liriodendron Tulipifera.) A tall, handsome, hardy, ornamental tree of pyramidal habit and rapid growth. Bears numerous tulip-shaped, fragrant flowers of a creamy yellow and orange color in June. 6 to 8 feet..... **\$2.00 each; \$20.00 per dozen.**
10 to 12 feet..... **\$2.25 each; \$22.50 per dozen.**

WEeping TREES

BIRCH. (Cut-leaf Weeping.) A tree of wonderful grace and beauty. Tall, slender, drooping branches and delicately cut leaves. It colors brilliantly in the fall. Its bare white trunk and branches make a beautiful winter picture. 6 to 8 feet..... **\$5.00 each; \$50.00 per dozen.**

CAMPERDOWN ELM. One of the most distinct and picturesque of the weeping trees. Hardy everywhere and not particular as to soil. Leaves are large, glossy and dark green. Its vigorous branches have a uniform weeping habit. **\$3.75 each; \$37.50 per dozen.**

MULBERRY. Teas Weeping. See "Ornamental Trees" Page 29.

WILLOW. Babylonica. (Common Weeping Willow.) A large tree with drooping branches. Leaves are small and bright green. Excellent for wet locations, but a credit to any lawn. 6 to 8 feet..... **\$2.00 each; \$20.00 per dozen.**

We do not guarantee or replace Plants, Shrubs or Trees at prices quoted.

Hardy Climbing Plants

AMPELOPSIS VEITCHII. (Japan Creeper or Boston Ivy.) The best climbing plant for covering brick or stone walls. 35c each; \$3.50 per dozen; by mail, 40c each.

AMPELOPSIS QUINQUEFOLIA. (Virginia Creeper.) For covering walls, verandas and trunks of trees. 50c each; \$5.00 per dozen; by mail, 55c each.

ARISTOLOCHIA SIPHO. (Dutchman's Pipe.) Large heart-shaped leaves. \$1.00 each; \$10.00 per dozen; by mail, \$1.10 each.

BIGNONIA RADICANS. (Trumpet Vine.) Flowers trumpet-shaped, bright scarlet. 50c each; \$5.00 per dozen; by mail, 55c each.

CELASTRUS SCANDENS. (Climbing Bitter Sweet.) Yellow flowers, followed in the autumn with orange fruit. 50c each; \$5.00 per dozen; by mail, 55c each.

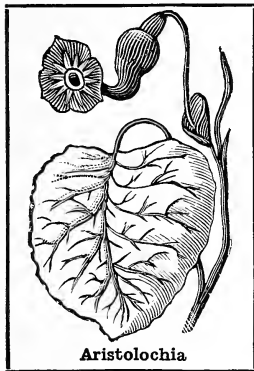
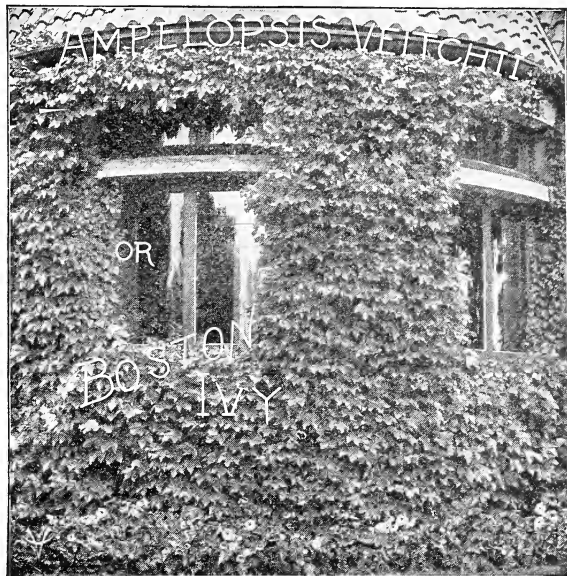
CLEMATIS. *Paniculata.* (Japanese Clematis.) Pure white, small fragrant flowers, borne in large clusters. 50c each; \$5.00 per dozen; by mail, 55c each.

EUONYMUS RADICANS. This vine is especially adapted for covering low foundation walls. Has deep evergreen foliage and is extremely hardy. Can also be used as an edging plant as it may be clipped same as boxwood. 50c each; \$5.00 per dozen; by mail, 55c each.

HONEYSUCKLE. *Aurea Reticulata.* Foliage variegated yellow and green, with yellowish white, fragrant flowers. 35c each; \$3.50 per dozen; by mail, 40c each.

Monthly Fragrant or Dutch. Blooms all summer. 25c each; \$2.50 per dozen; by mail, 30c each.

Halleana. Nearly evergreen; flowers pure white. 25c each; \$2.50 per dozen; by mail, 30c each.



Aristolochia

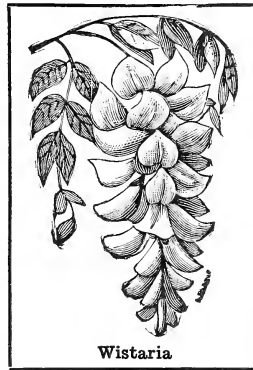
IVY, English. Beautiful, evergreen vine. 50c each; \$5.00 per dozen; by mail, 55c each.

KUDZU VINE. (Or Jack-and-the-Bean-Stalk.) A rapid growing vine. 25c each; \$2.50 per dozen; by mail, 30c each.

MATRIMONY VINE. The branches may be trained over fences or trellises. 35c each; \$3.50 per dozen; by mail, 40c each.

WISTARIA, CHINESE. Delicate, violet-blue blossoms. 60c each; \$6.00 per dozen; by mail, 65c each.

WISTARIA, CHINESE, WHITE. Pure white flowers. 60c each; \$6.00 per dozen; by mail, 65c each.



Wistaria

Roses

Hardy Hybrid Perpetual Strong Two-Year-Old Plants

Ready for Delivery During October and November

75c each; \$7.50 per dozen.

Sent by express at customer's expense.

If wanted by mail, add 5c each, 30c per dozen, for postage.

Captain Christy. Delicate flesh-pink.

Eugene Furst. Flowers velvety-crimson with maroon shading.

Frau Karl Druschki. An exquisite flower of the purest white.

General Jacqueminot. The old favorite; velvety-crimson.

John Hopper. Brilliant crimson, large fragrant flowers.

Mme. Plantier. Pure white, large and double, free bloomer.

Magna Charta. Deep pink, large and sweet scented.

Marshall P. Wilder. Large flowers of a bright carmine-red.

Mrs. John Laing. Large pink blooms, borne on long stems.

Paul Neyron. An immense rose of a deep rose color.

Prince C. De Rohan. (The Black Rose.) Deep velvety-crimson passing to intense maroon.

Ulrich Brunner. Cherry-crimson, large fine form; strong grower.



Roses

Hardy Climbing

Strong Two-Year-Old Plants

Ready for Delivery During October and November.

75c each; \$7.50 per dozen.

Sent by express at customer's expense.

If wanted by mail, add 5c each; 30c per dozen for postage.

American Pillar. Color is a delightful shade of pink.

Climbing American Beauty. Same as its namesake in size, color and fragrance, with the addition of the climbing habit.

Crimson Rambler. Bright crimson flowers.

Dorothy Perkins. Beautiful shell-pink flowers.

Dr. W. Van Fleet. Rich, flesh-pink flowers.

Flower of Fairfield. Large trusses of crimson flowers.

Gardenia. Flowers bright yellow, opening cream.

Hiawatha. Brilliant, ruby-carmine flowers.

Philadelphia Rambler. Deep crimson flowers.

Lady Gay. A delicate cherry-pink.

Silver Moon. Large pure white flowers.

Tausendschon. Beautiful soft pink flowers.

We do not guarantee or replace Plants, Shrubs or Trees at prices quoted.

Fruit Trees

SELLECT thrifty young trees in preference to old or very large ones; the roots are more tender and fibrous and they bear transplanting better and are more apt to live; they can also be more easily trimmed and shaped to any desired form, and in the course of a few years will usually outstrip the older ones in growth. If not prepared to plant when your stock arrives, "heel in" by digging a trench deep enough to admit all the roots, and setting the trees therein, carefully pack the earth about the roots.

By Express or Freight at Expense of Purchaser.

We do not guarantee or replace Trees or Shrubs at prices quoted.

While we make no charge for packing or delivery to freight or express offices here, still on account of increased cost of operation we cannot accept orders for Fruit Trees in smaller quantities than six, either straight or assorted, at prices quoted. In smaller quantities, add 25c per tree or make up a Club Order among your friends that can be shipped to one address.

Apples STANDARD

5 to 7 feet high. 90c each; \$9.00 per dozen.

SUMMER VARIETIES

Early Harvest. (Early June, Yellow Harvest). Fruit is medium size to large, the skin tender, very smooth, clear, pale, waxen yellow; flesh is white, rather fine, crisp, tender, juicy, at first bristly sub-acid, but eventually becoming milder and more agreeable for dessert. Ripens in July and August.

Red Astrachan. Fruit of good medium size; yellow, largely covered with red, presenting a striped appearance; flesh white, often strongly tinged with red, crisp, tender, juicy, sub-acid and of good quality. One of the most beautiful early market apples. Ripens in August.

Yellow Transparent. (White Transparent, Grand Sultan). The tree is an upright grower and usually bears fruit the next year after planting. Fruit of medium size, pale, waxen yellow, pleasantly acid, tender and good, splendid for home and market. Ripens in July and August, before Early Harvest.

Apples STANDARD

5 to 7 feet high. 90c each; \$9.00 per dozen.

AUTUMN VARIETIES

Delicious. This is probably the best of the newer varieties, having been satisfactorily tested in many parts of the country. Fruit is brilliant dark red, shading to yellow at the blossom end. Flesh is crisp, fine grained and quite juicy; flavor slightly acid, but very pleasing.

Duchess of Oldenburg or Duchess. A variety of great hardiness, yielding abundantly in all sections. Fruit is large, rounded, yellow, striped red, tender, juicy and of the best quality for cooking.

Fall Rambo. Fruit mottled and striped red and yellow, of medium size and good flavor; widely cultivated and highly esteemed for eating. Tree is a strong grower and heavy bearer.

Maiden's Blush. Fruit of uniformly good size, smooth, round, beautifully flushed with brilliant red on a yellow ground. Good for table use. One of the most beautiful and productive fall varieties. Ripens in August and September.

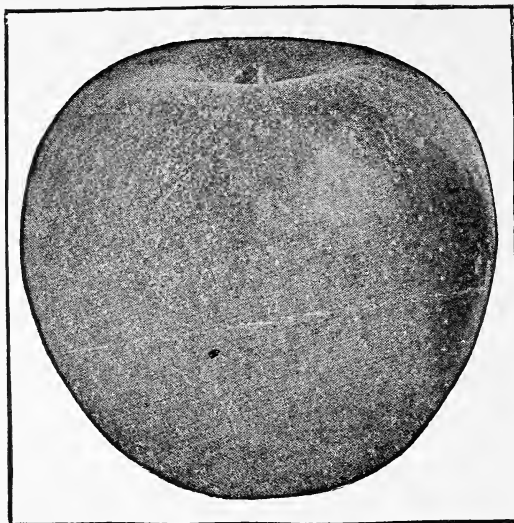
Apples STANDARD

5 to 7 feet high. 90c each; \$9.00 per dozen.

WINTER VARIETIES

Baldwin. A great market apple, very productive; fruit large, deep red, crisp, juicy and rich. December to March.

Banana. The fruit is large, clear, pale yellow with pinkish-red blush; flesh is tender and aromatic with a suggestion of banana flavor. November to February.



WINTER VARIETIES—Continued

Ben Davis. (New York Pippin.) A remarkable keeper and profitable market apple in many sections. Large, handsome, brightly striped with red, variable in flavor. Remarkably vigorous and fruitful. January to April.

Gano. Similar but superior to the Ben Davis, bearing a handsome and better quality of fruit that is large and dark red. Flesh is pale yellow, sub-acid, of good flavor and good keeping qualities. Very productive. December to March.

Grimes Golden. Fruit medium to large of transparent golden yellow and of best quality. Flesh tender, juicy, spicy and rich. November to February.

Jonathan. Fruit is medium sized, pale, yellow, heavily flushed with red; the flesh is white, juicy, tender and mild sub-acid. Excellent quality. November to March.

Northern Spy. Fruit large, striped crimson in the sun; juicy, rich and aromatic, retaining these qualities until late spring or summer. Valuable as an Aphis-resisting sort. January to June.

Rome Beauty. (Royal Red, Rome, Phoenix). The fruit is large and handsome, yellow with crimson cheek, tender, juicy, with yellow flesh; uniform in size, fine in appearance and of good quality. November to February.

Stayman's Winesap. Fruit medium size, mostly covered with red on a yellow ground; flesh fine, crisp, juicy, very tender and highly flavored. November to April, but will keep until May. A favorite apple for cider.

Winesap. Fruit medium large, skin almost entirely covered with dark red; flesh yellow, crisp, with a rich flavor. December to March.

York Imperial. (Johnson's Fine Winter, Shepp.) Fruit medium size, attractive, smooth, clear, waxen yellow, flushed with carmine. The flesh is crisp, firm, sub-acid and retains its flavor to the last. December to February.

Crab Apples

CRAB Apples do well on almost all soils. Trees are hardy and vigorous; come into bearing early and bear almost every year. Excellent for cider, vinegar and jelly.

5 to 7 feet high. 90c each; \$9.00 per dozen.

Hyslop. Bears large crimson fruit in clusters. October.

Transcendent. Largest and best of the Siberian Crabs. Tree is extremely hardy, good grower and usually very productive. Fruit is bright yellow, striped with red and one and one-half to two inches in diameter. Flesh is crisp, juicy and sub-acid. August and September.

Whitney. Tree is a hardy, thrifty, upright grower; comes into bearing young and is very productive. Fruit is green, spotted with carmine. Flesh yellowish, crisp, juicy, splendid for eating and cider. August and September.

Yellow Siberian. Color of fruit is amber with red blush and of medium size. September.

SUITABLE DISTANCES FOR PLANTING FRUIT TREES.

Apples, standard, 30 to 40 feet. Pears, standard, 18 to 20 feet. Peaches, 16 to 18 feet. Cherries, sweet, 18 to 20 feet. Cherries, sour, 15 to 18 feet. Plums, 16 to 20 feet. Quinces, 10 to 12 feet.

We do not guarantee or replace Plants, Shrubs or Trees at prices quoted.

FRUIT TREES—Continued

CHERRIES

No home orchard is complete without some cherry trees. They are easily grown wherever the apple succeeds and they bear good crops yearly.

HEART AND BIGARREAU (Sweet)

4 to 6 feet, first class. \$1.50 each; \$15.00 per dozen.

Black Tartarian. A beautiful purplish cherry of large size and superb quality, rich and juicy. Late June and July.

Governor Wood. One of the finest sweet cherries. Fruit is large, light red, juicy and delicious. Tree is healthy and productive. June.

Napoleon. Fruit of large size, white with red cheeks, firm and juicy. One of the best. Early July.

Rockport Bigarreau. Fruit large, round, light red, flesh firm and of fine flavor. Late June.

Yellow Spanish. A large handsome sweet cherry; yellow with light red cheek, firm and delicious. Late June.

DUKE AND MORELLO (Sour)

4 to 6 feet, first-class. \$1.50 each; \$15.00 per dozen.

Dyehouse. One of the earliest cherries. Similar to the Early Richmond but ripens about a week earlier and is much sweeter. The fruit is medium sized, soft, red and juicy. Tree is hardy and very productive. June.

Early Richmond or May. Unsurpassed for cooking. The tree is a free grower and reliable producer. The fruit is medium size, dark red, juicy and has an acid flavor. June.

English Morello. Fruit is large, dark red, nearly black, rich, juicy, with acid flavor. Tree is of dwarf growth. Late July.

Windsor. A large, delicious cherry; reddish-brown of liver colored. Valuable for late market or home use. July.

MULBERRIES

4 to 6 feet. \$1.00 each; \$10.00 per dozen.

Downing's Everbearing. One of the most prolific varieties, bearing an abundance of large, black, sub-acid fruit; hardy.

PEARS

STANDARD AND DWARF

5 to 7 feet, first-class. \$1.75 each; \$17.50 per dozen.

Bartlett. One of the most popular sorts, both for home and market. It is large, handsome, waxy yellow with red blush, flesh buttery, rich, juicy and highly flavored. August and September.

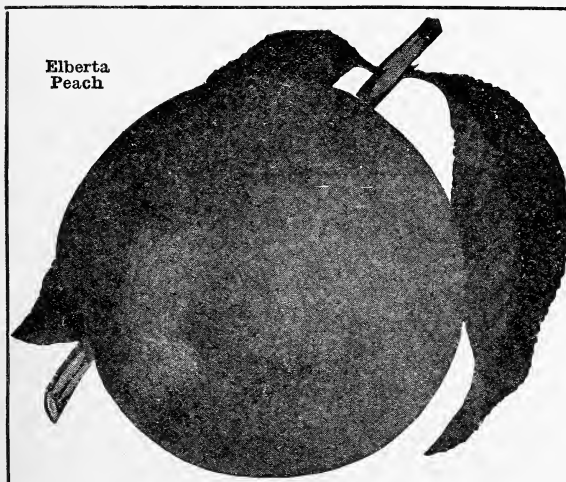
Duchess D'Angouleme. The skin is a dull greenish-yellow; flesh white, melting, juicy and well flavored. Tree is a vigorous grower. October and November.

Flemish Beauty. The fruit is large, the skin pale yellow; the flavor is sweet and melting. September and October.

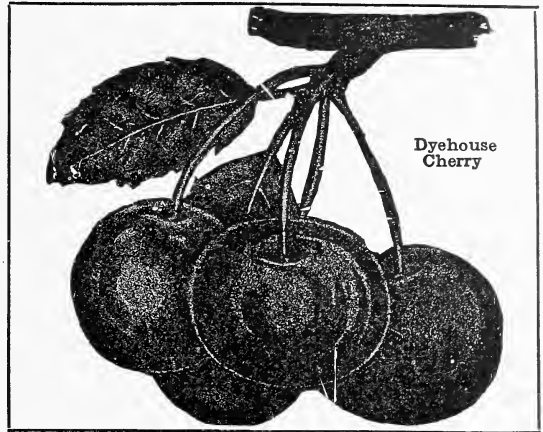
Kieffer's Hybrid. Large, rich color and good quality. Fine for canning and preserving. October and November.

Seckel. Small, yellowish brown, of rich, delicious flavor, very popular for dessert. August and September.

Sheldon. Of the finest quality, rich and aromatic. Fruit is greenish russet with a red cheek, large size and somewhat flattened shape. September.



Elberta
Peach



Dyehouse
Cherry

PEACHES

If living on a farm, plant a small peach orchard for home use or a larger one for commercial purposes. If living on a city lot plant a peach tree in the back yard.

4 to 5 feet. 60c each; \$6.00 per dozen.

Champion. One of the finest freestone peaches. Large, creamy-white with slight blush. Flesh white, rich, sweet, juicy and of excellent flavor. August.

Crawford's Early. A very large, rich, yellow freestone of the finest quality. Late August.

Crawford's Late. This peach is similar to Crawford's Early, but ripens two or three weeks later. Freestone. Late September.

Elberta. The fruit is large with golden-yellow skin covered largely with crimson; flesh is yellow, firm, juicy and of high quality, very prolific. Freestone. September.

Heath Cling. Fruit very large, creamy white with faint blush. Flesh white to the stone, juicy and sweet with a good aroma. October.

Old Mixon Free. The standard late white peach. A large tender freestone with tender, excellent white flesh. September.

PLUMS

Plum trees require but little room to grow and are prolific bearers. For dessert, cooking and canning the demand is almost unlimited.

STANDARD ON PLUM STOCKS

5 to 7 feet. \$1.75 each; \$17.50 per dozen.

Abundance. Large, beautiful yellow, heavily over-spread with purple-carmine. Flesh yellow, juicy, sweet, firm, with tough skin. July.

Bradshaw. Very large, dark violet red; flesh yellow, juicy and good. Tree an erect, vigorous grower. Middle of August.

Burbank. Fruit very large, color cherry red, mottled; flesh yellow, sweet and firm. Hardy and vigorous grower. August.

Lombard. A favorite for canning. Fruit is medium size, oval and violet red. Flesh is yellow, juicy, pleasant and good. Late August.

Red June. An early ripening plum of good quality. Fruit medium to large, purplish-red; flesh yellow, solid, juicy and of good quality. Early August.

Shippers Pride. Large, showy, dark purple fruit. The flesh is sweet and firm. September.

Yellow Egg. A beautiful yellow, egg-shaped plum of large size; flesh yellow. Excellent for canning. Late August.

QUINCES

3 to 5 feet. \$1.75 each; \$17.50 per dozen.

Apple or Orange. Large, round, bright golden yellow, cooks quite tender and has an excellent flavor. Valuable for preserving and for market. An abundant bearer.

Champion. The fruit is large, oval, of a rich color and excellent quality. Ripens late and keeps well until January.

We do not guarantee or replace Trees or Shrubs at prices quoted.

BLACKBERRIES, CURRANTS, GOOSEBERRIES AND RASPBERRIES

By Express or Freight at Expense of Purchaser.

BLACKBERRIES

THE Blackberry is one of the most profitable fruits to grow when properly managed as it thrives well in almost any soil, but reaches perfection in a strong loam tending towards clay.

\$1.00 per dozen; \$7.00 per 100.

Ancient Briton. Large berries of fine quality.

Blower. Large berries. Very productive.

Early Harvest. Fruit, medium size. The first to ripen.

Eldorado. Large fruit, fine quality, good keeper.

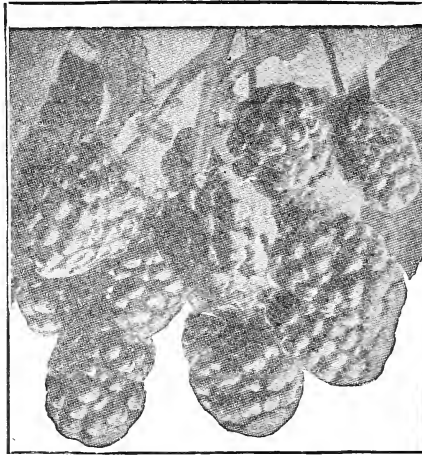
Mersereau. Berries large; good keeper and shipper.

Rathbun. Fruit very large, sweet and luscious.

Snyder. Medium size; sweet and juicy.

Taylor. Medium size fruit of fine flavor; ripens late.

Ward. Fine, large fruit of excellent quality; hardy.



DEWBERRY

Lucretia. One of the low-growing, trailing blackberries. It has proved highly satisfactory wherever tried, and many say it is the best of all the blackberry family.

\$1.00 per dozen; \$7.00 per 100.

GOOSEBERRIES

Two-Year-Old Plants

ONE of the hardiest of the bush fruits. The best results are obtained by planting in moist clay loam.

Downing. Large, pale green and of splendid quality for both cooking and table use.

35c each; \$3.50 per dozen.

Houghton's. Small to medium; roundish oval, pale red, sweet, tender. 35c each; \$3.50 per dozen.

Industry. The best English variety yet introduced. Berries large, dark red color when ripe.

35c each; \$3.50 per dozen.

Smith's Improved. Large, pale greenish yellow, skin thin, of excellent quality.

35c each; \$3.50 per dozen.

CURRANTS

Two-Year-Old Plants

A COOL, moist soil is best adapted to the growth of currants. They should be well cultivated and heavily mulched.

Cherry. Large, bright red berries, with a thin skin and fine flavor.

30c each; \$3.00 per dozen.

Champion. This is one of the best black currants; fruit is above medium size with fine flavor.

30c each; \$3.00 per dozen.

Perfection. Color of fruit is a beautiful bright red, of large size and a rich, mild, sub-acid flavor.

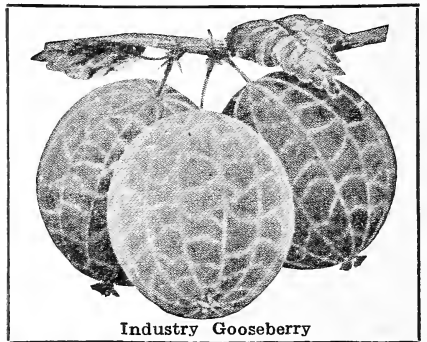
40c each; \$4.00 per dozen.

White Grape. The golden-white berries are borne in large, handsome clusters and have a mild sub-acid flavor.

30c each; \$3.00 per dozen.



Perfection Currant

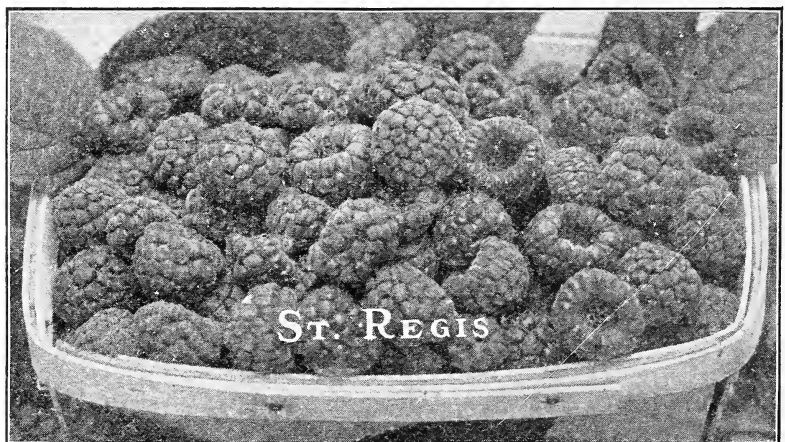


Industry Gooseberry

RASPBERRIES

ONCE the raspberry patch is established it requires very little cultivation. They thrive in good, moist soil. Black caps should be planted in the spring.

St. Regis. It is wonderfully prolific, the first or main crop being far greater than that of any other red variety known. It fruits on the old canes in generous quantities until late in August. By that date, berries begin to ripen upon the young canes, which continue to produce berries in increasing numbers until severe frost. The berries are a bright crimson, of large size and surpassing quality—rich, sugary with full raspberry flavor. They are exceedingly meaty, of firm texture and keep in good condition longer after being gathered than any other red raspberry. . . . 75c per dozen; \$5.00 per 100.



ST. REGIS

The following varieties are all, 75c per dozen; \$5.00 per 100.

Cardinal. Considered one of the very best purple berries, as they produce a fine quality of dark red or almost purple berries through a long season.

Cumberland. The largest black cap.

Cuthbert. Large, firm, deep rich crimson.

Gregg. A large black cap variety, fruit firm.

Kansas. The hardiest black cap; strong, vigorous.

We do not guarantee or replace Plants, Shrubs or Trees at prices quoted.

STRAWBERRIES AND GRAPE VINES

By Express or Freight at Expense of Purchaser.

STRAWBERRIES

STRAWBERRIES will do well in any soil that will grow good corn. Soil should be made fine and loose. A generous supply of well rotted manure incorporated in the soil is a great benefit.

Strawberries are naturally shallow-rooted plants and must be encouraged continually to send their roots deep, in order to be sure of a supply of moisture and to feed in a soil of even temperature.

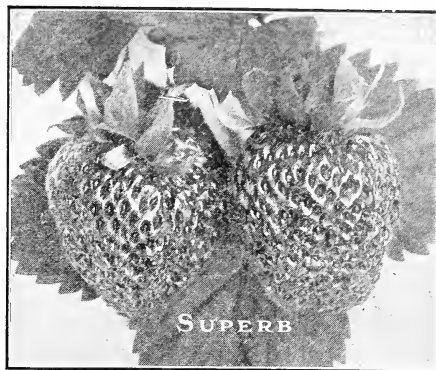
Plant in spring—always the best time—and see that no soil is allowed to remain in the crown of the plant.

Mulching strawberries is done to keep the soil moist and cool in summer, to protect the berries from mud and dirt when ripe and to protect the plants in winter. The winter protection should not be put on until the ground freezes.

Strawberries for garden culture should be planted in rows three feet apart and one foot apart in the row. For field culture plant in rows four feet apart and eighteen to twenty-four inches apart in the row.

Dip the plants in water as soon as received, and bury the roots in moist, shady ground till you are ready to set them out.

Superb. The Ever-bearing Strawberry—Superb is a truly wonderful, fall-bearing variety, and what makes it unusually profitable is the fact that it also produces a heavy yield of choice fruit in the early summer, along with the standard varieties. It continues to give large yields of choice berries throughout August, September and in October up to the time the ground is slightly frozen. Plants of this variety which are set in the spring should have the blossoms removed until the first of July. After this date the blossoms may be left to develop into berries, and a good crop of fruit will thus be secured the same season the plants are set, without injury to the plants. **60c per dozen; \$2.50 per 100.**



The following varieties are all, 50c per dozen; \$1.25 per 100.

Aroma. One of the finest for long-distance shipping. The large berries are bright red to the center, of conical shape with prominent and attractive yellow seeds.

Gandy. One of the best late varieties. Berries large, of fine form and excellent quality.

Glen Mary. Large to very large, sometimes flattened; sweet and rich.

Nick Ohmer. A fine, fancy market berry and always superb for the table. A giant in size.

Senator Dunlap. Exceedingly vigorous. Fruit large, regular and attractive in form, deep red to the center.

Wm. Belt. Berries very large, conical, bright red; of good flavor. The plant is strong, healthy and fruitful.

GRAPES

ALL TWO-YEAR-OLD SELECTED STOCK

This is one of the most satisfactory crops that can be grown, because it can be depended upon practically every year.

Grape vines will grow almost everywhere, but they should be carefully cultivated and pruned.

BLACK OR PURPLE GRAPES

***Concord.** Large, black grape, hardy and productive; juicy and sweet.

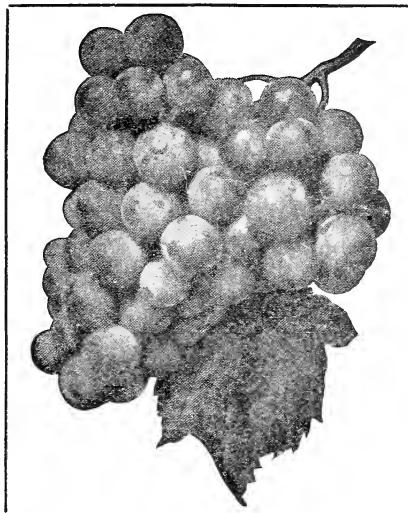
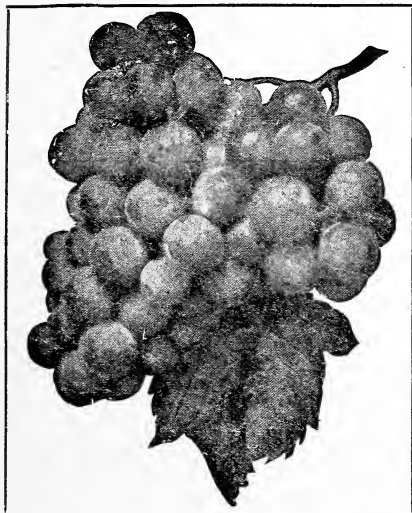
20c each; \$2.00 per dozen.

Ives' Seedling. Dark purple, sweet.

30c each; \$3.00 per dozen.

Moore's Early. Ripens ten days earlier than Concord; bunch and berry round and large.

30c each; \$3.00 per dozen.



RED GRAPES

***Catawba.** Berries large, round; when ripe a dark copper color; sweet, rich..... **25c each; \$2.50 per dozen.**

Delaware. Small, light red, thin skin; very juicy, sweet, sprightly. **30c each; \$3.00 per dozen.**

WHITE OR YELLOW GRAPES

***Niagara.** Bunch and berries large, light greenish white, slightly ambered..... **30c each; \$3.00 per dozen.**

Pocklington. Bunch and berry very large; attractive, golden yellow color..... **30c each; \$3.00 per dozen.**

Varities marked with a (*) are best for arbors.

HUBBARD THE NEW BLACK GRAPE

Quality sweet and delicious, having that fine and pleasant flavor approaching the European or Vinifera Grapes. Berries and bunch large and uniform; ripens ten days earlier than Concord. Supply limited. **75c each; \$7.50 per dozen.**

SUITABLE DISTANCES FOR PLANTING SMALL FRUITS AND GRAPE VINES

Blackberries, 5 to 7 feet.

Currants, 3 to 4 feet.

Gooseberries 3 to 4 feet.

Raspberries, red, 3 to 4 feet.

Raspberries, black, 4 to 5 feet.

Strawberries, 1 x 3 feet.

Strawberries, in beds 1½ x 1½ feet.

Grapes, 8 to 10 feet.

We do not guarantee or replace Plants, Shrubs or Trees at prices quoted.

McCullough's High Grade Fertilizers

All Fertilizers Delivered Free on Board Cincinnati. Prices Subject to Change Without Notice.

THE benefits arising from the use of Commercial Fertilizers are too well known, and their value too well established, to require any argument or explanation. Soils that have been almost entirely exhausted by successive croppings have, by their use, been restored to their former fertility; in fact, bring larger crops than when the soil was new.

HOW TO APPLY COMMERCIAL FERTILIZERS

For Cereals: Apply 200 to 500 lbs. per acre.

For Vegetables and Fruits: Apply 500 to 1,000 lbs. per acre.

For Meadows and Alfalfa: Apply 500 to 600 lbs. per acre at seeding time, or as a top dressing.

For Corn: Drill 200 to 400 lbs. per acre all over the field before planting. Then apply 100 to 125 lbs. per acre along the row (not in the hill), at planting.

If your land is sour, we recommend sweetening with lime some weeks before applying fertilizers.

PURE BONE MEAL

THIS pulverized ground bone is excellent for rose culture and lawns. It decomposes rapidly and is quickly effective. Should be applied at the rate of 400 to 500 lbs. per acre. Analysis: Ammonia 2%; total phos. acid, 27%.

1 lb., 10c; 5 lbs., 35c; 10 lbs., 65c; 25 lbs., \$1.15; 50 lbs., \$2.00; per bag of 125 lbs., \$4.00.

SHEEP MANURE—Pulverized

THIS is a natural manure; excellent for mixing with the soil. Strewn over and dug into the vegetable garden or placed directly in drills or hills, it promotes a rapid, steady growth. Especially valuable for lawns, contains all the constituents for promoting a quick, luxuriant growth and a rich green color. Use at the rate of from 500 to 600 pounds per acre. For pot plants, mix one part of sheep manure to six parts of soil. For use in the vegetable garden spread over the surface and dig in. Being soluble, it readily makes a safe liquid manure—one pound to five gallons of water can be used. 1 lb. carton, 10c; 5 lbs., 30c; 10 lbs., 50c; 25 lbs., \$1.00; 50 lbs., \$1.50; 100 lbs., \$2.25.

CATTLE MANURE—Shredded

A SUBSTITUTE for stable manure in gardens and greenhouses, as it supplies plant food, humus and organic matter; largely used for rose culture and for mulching. The quality we offer is selected manure taken from paved Stock Yards cattle pens—dried and sterilized by a high temperature direct heat process which kills weed seeds, fungus and disease germs. 100 lb. bags only. Per bag of 100 lbs., \$2.25.

LAWN LIME

THE GRASS AND GARDEN TONIC

THIS lime is especially prepared for use on soil, as it is essentially a plant food, useful for correcting acid soils, also for binding sandy soils and loosening clay soils. Should be applied at the rate of 1,000 to 2,000 lbs. per acre for sandy soils and 2,000 to 3,000 lbs. per acre for clay soils, a few weeks before applying Commercial Fertilizers.

Lawn Lime will renovate old lawns and cure the acidity of the soil.

If the ground is covered with moss and the grass seems sour and unsightly, sprinkle **Lawn Lime** freely over the surface and watch the satisfying results.

It is a well-known fact that 90% of the lawns need **Lawn Lime**, which can be applied at any time with good results.

For renewing old lawns it is unequalled; rake the lawn thoroughly, sow your grass seed, then sprinkle thoroughly with **Lawn Lime** at the rate of 100 lbs. for each four hundred square feet.

To make a new lawn, after all grading is done and every stone and stick removed, cover with a generous coating of **Lawn Lime** as indicated above, which should be raked into the soil, then sow the seed and rake in well, after which it should receive a good rolling to bring the seed into close contact with the soil and conserve the moisture.

Per bag of 100 lbs., \$1.25; 5 bags, (500 lbs.), \$5.50; 10 bags, (1,000 lbs.), \$10.00.

HALF AND HALF

IS especially valuable for Field Crops, Potatoes and Grain. Should be applied at the rate of 400 to 500 lbs. per acre. Analysis: Ammonia, 2%; total phos. acid, 16%; potash K₂O, 2%.

5 lbs., 30c; 10 lbs., 50c; 25 lbs., \$1.10; 50 lbs., \$2.00; per bag of 125 lbs., \$3.50.

AGRICULTURAL LIMESTONE

DESTROYS SOIL ACIDITY—LOOSENS UP CLAY SOILS—TIGHTENS UP SANDY SOILS

PUTS soils in better mechanical condition and therefore aids in the development of beneficial soil Bacteria, which acts as a plant food for leguminous crops, such as Alfalfa, Sweet Clover, Red and Crimson Clovers, Soy Beans, Garden Beans and Peas, Cow Peas, Vetches, etc.

Apply at the rate of 2,000 to 4,000 lbs. per acre, and may be applied at any season of the year.

Packed in 100 lb. bags.

Per bag of 100 lbs., \$1.15; 5 bags, \$5.00; 10 bags (1,000 lbs.), \$9.00.

NITRATE OF SODA

CARRIES approximately 20% of ammonia and comes in crystals which vary in size. It is sometimes lumpy and the lumps should be crushed to a powder before the material is applied. Owing to the fact that Nitrate of Soda is a highly concentrated form of plant food, care should be taken in applying the material to plants on the leaf surface.

As a top dressing use at the rate of 100 lbs. per acre between the rows when the plants are well established, on the following vegetables: Cabbage, Cauliflower, Egg Plant, Lettuce, Spinach, Beets, Celery and Onions. For Asparagus, a top dressing of 250 lbs. per acre when the young shoots are starting in the spring. For strawberries, apply between the rows at the rate of 100 lbs. per acre at the time of blossoming. For the home garden, apply a solution of one ounce to two gallons of water.

1 lb., 15c; 2 lbs., 25c; 10 lbs., \$1.15; 25 lbs., \$2.00; 50 lbs., \$3.50; 100 lbs., \$6.50.

SULPHATE OF AMMONIA

CONTAINS approximately 25% of ammonia and comes in fine crystals which are very nice to apply broadcast. Owing to its firmness and keeping qualities it is preferred by some gardeners and fruit growers to Nitrate of Soda. Owing to the fact that it carries 5% more ammonia to the weight than Nitrate of Soda, the user should apply four pounds of Sulphate of Ammonia where he uses five pounds of Nitrate of Soda. 1 lb., 15c; 2 lbs., 25c; 10 lbs., \$1.15; 25 lbs., \$2.00; 50 lbs., \$3.50; 100 lbs., \$6.50.

CROWN FERTILIZED HUMUS

THIS article is prepared from deposits of decayed vegetable matter. It has been successfully used for years and has proven to be worthy of extensive use. It is desirable for greenhouse and flower garden work, also for lawns and vegetables.

Humus in some form is the most essential element of plant life. It is rich in ammonia, phosphoric acid, potash and lime. 5 lbs., 25c; 10 lbs., 40c; 25 lbs., 75c; 50 lbs., \$1.25; 100 lbs., \$1.75; 500 lbs., \$8.00; 1000 lbs., \$15.00.

ACID PHOSPHATE 16%

SOME soils contain a large percentage of Nitrogen and some Potash, but still are deficient in Phosphoric Acid. This must be supplied for the purpose of producing a balanced combination of fertilizer elements, by the application of 16% Acid Phosphate which produces a beneficial effect by supplying the proper proportion of Phosphoric Acid. Apply from 200 to 400 lbs. per acre. Analysis: Available phos. acid, 16%; insoluble, 1%.

5 lbs., 30c; 10 lbs., 50c; 25 lbs., \$1.00; 50 lbs., \$1.50; per bag of 125 lbs., \$2.25.

MURIATE OF POTASH

APPLY 100 to 150 lbs. per acre, usually with other fertilizers. This must be used with great care as it is very powerful. Excellent for Potatoes, Corn, Grain, etc.

1 lb., 15c; 2 lbs., 25c; 25 lbs., \$2.00; 100 lbs., \$6.50.

HYDRATED LIME

THIS lime is used for sweetening acid or sour soils, 3 lb; package, 15c; bag of 50 lbs., \$1.00; 5 bags (250 lbs.), \$4.50. 10 bags (500 lbs.), \$9.00.

DRIED BLOOD MEAL

THIS is a splendid fertilizer for Roses, Carnations, Chrysanthemums, etc., as well as for pot plants. Can be mixed with the soil or applied in liquid form.

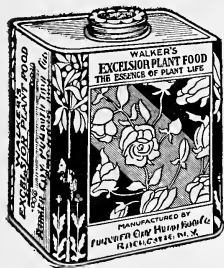
1 lb., 15c; 25 lbs., \$2.15; 50 lbs., \$3.90; 100 lbs., \$7.00.

(Fertilizers continued on next page.)

Write for Special Prices on lots of 500 lbs. or over.

FERTILIZERS—Continued

EXCELSIOR PLANT FOOD



An odorless preparation, combining in a concentrated and soluble form every element required in plants and flowers to produce vigorous growth and a profusion of flowers and fruit. Wonderful results are obtained, after one or two applications. It is immediately soluble in water, and available to plant life from the moment of application.

It assists in retaining moisture: will mature plants from two to three weeks earlier.

Small package, 15c; medium size package, 25c; large package, 40c.

ZENKE'S NEW PLANT LIFE

(Liquid)

It is a plant food containing in proper percentage **All Elements** essential to plant growth.

Mix one quart with 50 gallons of water and water plants sufficiently to saturate soil. Use about one quart to one square foot of soil.

It is immediately available to absorption by plants and saves time and labor, 8 oz. can, 25c; gallon, \$3.00. (One gallon is sufficient to make 200 gallons of solution.)

STIM-U-PLANT

PLANT STIMULANT TABLET

GROWERS of fine Flowers, Shrubs and Vegetables for the best markets and for exhibition, fertilize and stimulate them frequently, a little at a time. An excellent fertilizer for this purpose is Stim-U-plant, an odorless, highly concentrated plant food, in tablet form, with guaranteed chemical analysis of 11 per cent nitrogen, 12 per cent phosphoric acid, 15 per cent potash. The proportions are accurate, there is no wasted filler, and in this form you apply plant food exactly when and where and as needed.

Easy to Use. Simply insert tablets in soil near plants or dissolve in water at the rate of four tablets to the gallon and apply as liquid manure. Complete directions with every package. Order Stim-U-plant tablets with your seed and plant order. Price, Trial Size, 15c; Small Size, 25c; 100 tablets, 75c; 1,000 tablets, \$3.50.

MOSS, PEAT AND POTTING SOIL

Moss, Green Sheet. For hanging baskets, etc. Per bale, 50c; large bundle (5 bales), \$2.00.

Moss, Sphagnum. For packing plants and growing orchids, etc. 1 lb., 15c; per bale, \$2.50.

Peat, Jersey. Per bushel, \$1.50; per bag of two measured bushels, \$2.75.

Potting Soil. Peck, 35c; per bushel, \$1.25.

Insecticides and Fungicides

Liquid Insecticides and Poisons cannot be sent by mail.

Important Information On Dormant Sprays

WE cannot emphasize too strongly the importance of spraying with Lime-Sulphur Solution or Scalecide while the trees are dormant.

As soon as possible after the leaves have fallen, spraying should begin on Shrubs, Shade and Fruit Trees, as the scale insects at that time are more readily destroyed.

Spray any time during the fall and winter on a bright sunny day, when the temperature is not under 40 degrees.

If unable to spray during fall or winter, it should be done in spring before buds open.

The application of Lime-Sulphur or Scalecide on Apple and Pear Trees controls San Jose Scale, Scurfy Scale, Aphis eggs and Mite eggs.

When Lime Sulphur or Scalecide is applied to other Fruit Trees and Small Fruits, it controls Leaf Curl, San Jose Scale and Scab on Peach Trees; San Jose Scale and Aphis eggs on Plum Trees; San Jose Scale on Cherry Trees; San Jose Scale and Leaf Spot on Quinces; San Jose Scale, Scurfy Scale and Oyster Shell Scale on Currants and Gooseberries; Rose Scale and San Jose Scale on Raspberries and Blackberries.

We are constantly prepared to supply either of these sprays in any quantity.

SCALECIDE

NEVER in the history of spraying has "A Complete Dormant Spray" been more essential, nor, in fact, more appreciated than at this time. For even in these days of retrenchment in many lines, the growth and popularity of Scalecide has been phenomenal. This has been largely due to the fact that it more nearly embodies "completeness" by doing all and more than can be expected of a dormant spray.

SCALECIDE is more than a Scale Spray—it is a tree invigorator, destroying blight cankers from which fire blight, collar rot, root rot, etc., is spread. As a delayed dormant spray when the buds are just starting it controls aphis without the addition of Nicotine.

Mixes Instantly With Water and Stays Mixed.

Add one gallon of "Scalecide" to 15 gallons of water, stir, and you are ready to spray any kind of tree when the leaves are off, provided it is not too cold to be comfortable.

Use a fine spray nozzle and thoroughly wet the tree from the topmost twig down to the ground and around the base of the tree and you can rest assured that you will have accomplished everything you could with any other dormant spray or combination of sprays, and in addition, some things they cannot do.

If used according to directions, will kill every San Jose Scale that comes in contact with it.

1 qt., 60c; 1 gallon, \$1.40; 5 gallons, \$6.25; 10 gallons, \$10.60; 30 gallons, \$26.00; 50 gallons, \$38.00.

S. W. DRY LIME-SULPHUR

FROM 10 to 12 pounds of S. W. Dry Powdered Lime-Sulphur should be used with 50 gallons of water, for a dormant spray. 1 lb. can, 35c; 5 lb. can, \$1.50; 10 lb. can, \$2.25; 25 lb. can, \$4.50.

LIME-SULPHUR SOLUTION

FOR fall, winter and early spring spray. Destroys San Jose Scale, Peach Leaf Curl, Bud Moth, Apple Aphis, Blister Mite, any Scale Insects or Bark Lice. 1 gallon will make 8 gallons spraying liquid. 1 qt., 40c; ½ gal., 65c; 1 gal., \$1.00; 5 gal., \$3.50; ½ bbl. (25 gals.), \$9.50; 1 bbl., (50 gals.), \$15.00.

FISH OIL SOAP

FOR destroying insects on Plants, Trees, Vines, etc. This is also a contact remedy. ½ lb., 15c; 1 lb., 25c; 5 lbs., \$1.10; in bulk, 25 lbs., \$4.00.

"BLACK LEAF 40"

FOR Aphis indoors use ¼ pint "BLACK LEAF 40" to 100 gallons of water or 1 teaspoonful to 1 gallon of water, with sufficient soap in water to make good suds. Several formulas for destroying other sucking insects on each package. This is a contact remedy. 1 oz. bottle, 35c; ¼ lb. tin, \$1.25; 2 lb. tin, \$3.50; 10 lb. tin, \$13.50.

ZENKE'S LIQUID FUNGICIDE

POWERFUL, reliable remedy for Leaf Spot, Leaf Rust, Scab, Mildew, Black and Brown Rot and most other Fungoid troubles. Per gallon, \$3.00. (Sufficient to make 50 gallons of solution.)

ZENKE'S COMPOUND PLANT INSECTICIDE

IS a contact remedy (Liquid). Very effective against Plant Lice, Black and White Fly, Mealy Bugs, Scale Insects, Eggs and Larva.

A very effective wash for Palms and Rubber Plants. 8 oz. can, 25c; per gallon, \$2.00. (One gallon is sufficient to make 20 to 35 gallons of solution.)

HALL'S NICOTINE FUMIGATOR

FOR fumigating greenhouses—12 ½ per cent Nicotine guaranteed. One cone will fill 7,000 cubic feet with deadly Nicotine fumes. Three cones will rid the average size greenhouse (20 by 100 ft.) of aphids, thrips and similar soft-bodied sucking insects and the cost will be only 25c. 1 lb. tins, \$1.25; 2 ½ lb. tins, \$2.50; 10 lb. tins, \$8.50.

NICO-FUME LIQUID

FOR destroying Aphis, Thrip and Red Spider. Contains 40 per cent nicotine.

Use one to two teaspoonsful of Liquid to each gallon of water. This is a contact remedy. ¼ lb., 75c; 1 lb., \$2.25; 4 lbs., \$8.00; 8 lbs., \$15.00.

NICO-FUME PAPER

STRIPS of paper strongly saturated with Nicotine. These, when suspended and lighted, make one of the best and simplest methods of fumigating greenhouses.

Use 4 to 6 sheets for ordinary house 100 feet long by 20 feet wide. Price, air-tight cans, 24 sheets, \$1.25; 144 sheets, \$5.50; 288 sheets, \$10.00.

TOBACCO DUST

ASURE remedy for Green Fly, Aphis, Fleas, Beetles, etc. 1 lb., 10c; 4 lb., 25c; 10 lbs., 50c; 100 lbs., \$3.50.

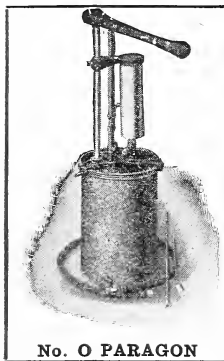
TOBACCO DUST FOR FUMIGATING.

1 lb., 15c; 3 lbs., 40c; 10 lbs., 75c; 25 lbs., \$1.75; 100 lbs., \$6.00.

Spraying Pumps and Appliances

SPRAYING is of such importance that the Experiment Stations all over this country have given much of their attention to it, and their findings have been of incalculable value. Diseases and insects can no longer exist if the proper Insecticide is applied through the medium of an up-to-date spray apparatus.

Paragon Sprayers



No. 0 PARAGON

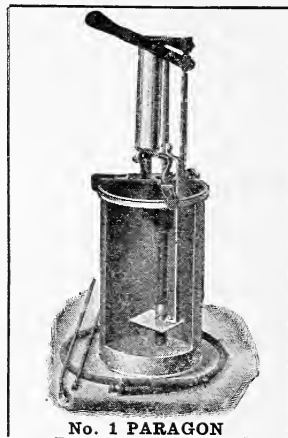
THESE Sprayers are strongly constructed and can be easily operated by one man. They can be brought in close proximity to the work, thereby eliminating the use of a long, expensive hose. Our patented, self-cleaning strainer prevents the necessity of first straining the liquid to be sprayed. The agitator also keeps the liquid thoroughly stirred.

The spray nozzle has only $\frac{1}{2}$ -inch outlet and spreads the liquid well, thereby covering a large surface with a small amount of liquid, making it a very economical sprayer.

All parts of the machine are made of the best material obtainable.

The reservoir is made of heavy galvanized iron. All essential fittings and valves are made of brass, making it strong and durable. The body of pump is cast iron, well ribbed to prevent breakage. The screen is of heavy perforated brass and will last many years. The pump frame can easily be removed from tank when it needs cleaning and by running water through machine after using, the entire machinery can be easily and thoroughly cleaned.

Suitable for spraying Insecticides and Fungicides on trees, shrubs and vines, as well as the application of Whitewash and Cold Water Paints.

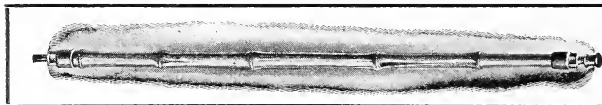


No. 1 PARAGON

Price List of Paragon Sprayers

- No. 0.** Capacity, $3\frac{1}{2}$ gallons. Equipment, 4 feet spray hose, 3 feet spray pipe, 1 mist spray nozzle, 1 steel cap for mist nozzle, 1 straight spray. Price.....\$12.50
- No. 1.** Capacity, 6 gallons. Equipment, 5 feet 6-ply hose, 5 feet spray pipe, two spray nozzles. Price.....\$17.50
- No. 2.** Same capacity and equipment as No. 1 but mounted on strong steel truck which can easily be wheeled to any desired place. Truck is easily detached when desired. Price.....\$22.50
- No. 3.** Capacity, 12 gallons. Equipment, 10 feet 6-ply hose, $7\frac{1}{2}$ feet spray pipe, two spray nozzles. Mounted on strong steel truck and can easily be wheeled to any desired place. Truck is easily detached when desired. Price.....\$25.00
- No. 3.** Machine without truck. Price.....\$21.50

- No. 4.** Capacity, 28 gallons. Equipment, 20 feet 6-ply hose, 10 feet spray pipe, two spray nozzles. Mounted on two strong 30-inch wheels. Price.....\$39.50
- No. 4.** Machine without wheels. Price.....\$29.50
- No. 5.** Capacity, 50 gallons. Equipment, 25 feet 6-ply hose, 10 feet spray pipe, one 3-way spray nozzle, one single spray nozzle. This sprayer has solid cast brass pump and large air chamber. It is positively the very best hand power sprayer made for tree spraying. Price.....\$45.00
- Nos. 1 and 3** Sprayers can be furnished with solid all cast brass pumps for—additional.....\$5.00
- No. 4** Sprayer can be furnished with solid all cast brass pump for—additional.....\$6.00
- Send for descriptive circular giving detailed information.



Bamboo Brass Lined Spray Poles

- 12-foot lengths. Net price.....\$5.00
- 10-foot lengths. Net price.....4.75

Paragon Bucket Spray Pump

IN DEVELOPING the Paragon Bucket Spray Pump, it has been the aim to produce an efficient spray pump at the lowest possible cost at the same time to incorporate in this pump the features that have built up the wonderful reputation of Paragon Sprayers.

The non-clogging feature of this spray pump is guaranteed by the combination of the circular strainer which contains **SIXTEEN**

square inches and the all metal agitator which automatically cleans the strainer at each stroke of the pump and keeps the solution thoroughly stirred.

The adjustable clamp makes it possible to attach this spray pump to any pail or like container, holding the spray pump in a rigid upright position.

The circular strainer, the all metal agitator and the adjustable clamp are exclusive features found only in the Paragon.

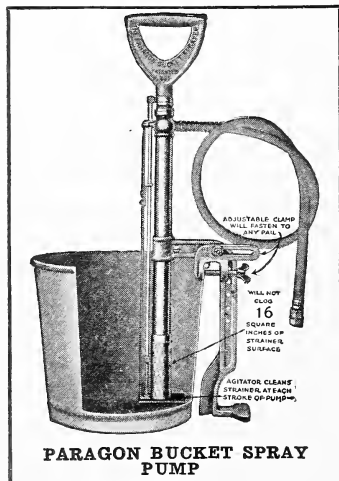
The spray hose is of high quality five ply.

Three nozzles are furnished with each spray pump, one brass mist spray, one brass straight spray and one steel spray tip for whitewash, water paint, etc.

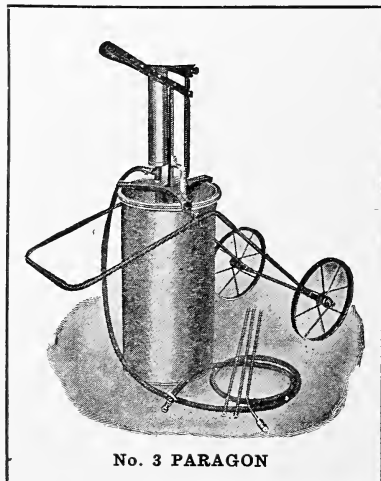
Each pump is rigidly inspected and tested and is covered by our broad guarantee.

Price.....\$6.00

Paragon Sprayers do Not Clog



PARAGON BUCKET SPRAY PUMP

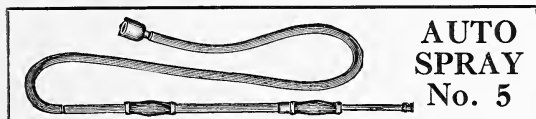


No. 3 PARAGON

SPRAY PUMPS, ATOMIZERS AND BELLOWS—Continued

MYER'S SPRAY PUMPS

- Myer's Lever Bucket Brass Spray Pump.** Complete with hose and graduating Vermorel fine, coarse spray and solid stream nozzle.....\$6.00
- Myer's Defiance Brass Spray Pump.** Complete with hose and graduating Vermorel fine, coarse spray and solid stream nozzle.....\$5.00
- Myer's Little Giant Brass Spray Pump.** Complete with hose and imperial combination, fine, coarse spray and solid stream nozzle.....\$4.00
- Four-foot Pipe Extension**.....60c
- Bordeaux Nozzle**.....\$1.00
- Graduating Vermorel Nozzle**.....90c



**AUTO
SPRAY
No. 5**

THE pump is made entirely of brass. It has two ball valves so arranged that they may be instantly cleaned. The threads are all cut, not rolled, so that there is no chance for leakage. Pump is double acting and will generate a pressure of 180 lbs.

We furnish with this pump 3½ ft. of ¾ in. suction hose and a heavy strainer that keeps the hose from working out of a bucket or tank.

The extension is extra and is very useful for spraying field crops. The extension is curved so that the operator can direct the spray up or down while using the pump in a horizontal position. Extension can be used on any of the Auto-Sprayers.

- Auto-Spray No. 5.** Pump, hose, nozzle and strainer, complete.....\$5.00
- Brass Extension, extra, 60c. Elbow, extra**.....40c

PERFECTION COMPRESSED AIR SPRAYER

It is just the thing for general work around the house, in gardens and small farms. Used for potato spraying, white-washing, spraying disinfectants, cold water paints, etc. Seams are all riveted and soldered, giving the great strength necessary for the high pressure it develops, and which is necessary for good results.

Pump. 1¼ inches diameter, 15 inches long, seamless brass tubing. The plunger is equipped with Hudson special plunger leathers. The valve is brass.

Tank. 7½ inches diameter, 20 inches long, capacity 4 gallons. Made of first quality galvanized sheets or all brass as ordered.

Package. One in a heavy carton; shipping weight ten pounds.

- No. 110G.** Galvanized Steel Tank, 4 Gallons.....\$6.50
- No. 110B.** Brass Tank, 4 Gallons.....9.50

PERFECTION JUNIOR COMPRESSED AIR SPRAYER.

Tank, 6½ inches diameter, 17 inches long; capacity about 2½ gallons. Made of first quality galvanized sheets. Tested under actual working conditions at the factory.

- No. 140—G.** Galvanized Tank. Price, each.....\$5.00

ACME CYCLONE ATOMIZER. Well made of heavy, bright tin plate. Tank 4 by 5 inches, air chamber 14½ inches long, 1¾ inches in diameter. Capacity, 5 pints. Price, each.....50c

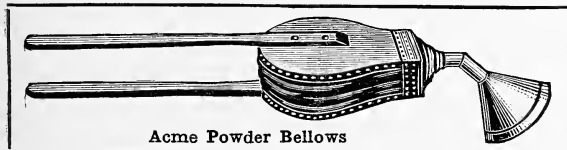
ACME GLASS TANK ATOMIZER. Tank, standard quart Mason jar, air chamber 1¼ inches in diameter, 18½ inches long. Plunger rod copper bessemer of our own special type which will not corrode or rust. If jar is accidentally broken can be replaced at once with a Mason Fruit Jar. Price, each.....75c

ACME FOG ATOMIZER. Strong, durable and satisfactory. Price, each.....50c

MIDGET ATOMIZER. A small, compact, substantial and very efficient Tin Sprayer. Price, each.....35c

WOODASON'S POWDER BELLOWS.

Single cone, small, \$2.50; single cone, large, \$3.75.



Acme Powder Bellows

AUTO COMPRESSED AIR SPRAYER

Can be suspended from the shoulder, allowing the free use of the arms. A few strokes of plunger in air chamber will com-

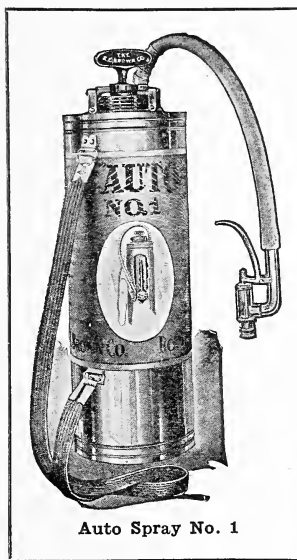
press enough air to discharge the entire contents. A practical machine for potatoes, tobacco, small fruits, vineyards, poultry houses, green houses, etc. Extension pipes for spraying trees.

- Auto Spray No. 1-B.** Brass tank, with Auto-Pop Nozzle.....\$9.50

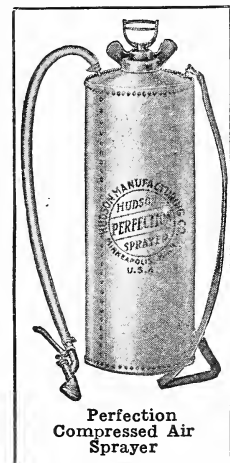
- Auto Spray No. 1-D.** Galvanized tank, with Auto Pop Nozzle...\$6.50

- Brass Extension.** Two feet, per length.....60c

- Elbow**.....40c

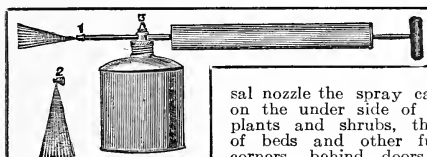


Auto Spray No. 1



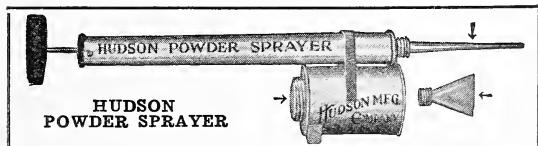
**Perfection
Compressed Air
Sprayer**

ROBERTSON COMPRESSED AIR SPRAYER



They give a continuous spray. By means of the univer-

sal nozzle the spray can be thrown on the under side of the leaves of plants and shrubs, the under side of beds and other furniture, into corners, behind doors, on top of mouldings, window casings, behind steam pipes, and other difficult places. Capacity, one quart. Tin Pump with Tin Reservoir, 90c each; Tin Pump with Galvanized Reservoir, \$1.15 each; Brass Pump with Brass Reservoir, \$1.65 each.



**HUDSON
POWDER SPRAYER**

Tank 3 inches in diameter; 4 inches long. A small and effective Powder Sprayer. Price, each.....50c

ACME POWDER BELLOWS. It requires no base of supplies; all you need carry is a can of dry Insecticide and bellows. Without stooping—the elbow does it—it applies any powdered poison on any plant in any desired quantity. The elbow may be detached, if desired. We also furnish a spreader for distributing the blast. Price, each...\$1.50

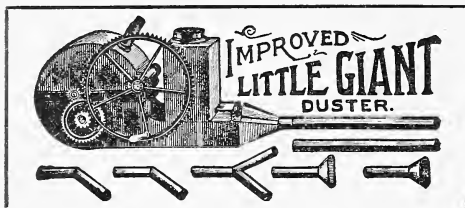
POWDER GUNS

LEGGETT'S CHAMPION INSECTICIDE DUSTER

The machine that started the growers "Dusting." Weighs about 6 lbs. Without tubes is 27 inches long. Each machine is packed in a case complete, comprising four 16 inch tubes, six nozzles and two straps.

Cased for shipping, weighs 17 lbs. The reservoir holds 4 lbs. of Paris Green (or over a quart of powder).

When all tubes are attached, foliage about ten feet high may be reached. Price.....\$15.00



LITTLE GIANT DRY POWDER DUSTER

For Farm, Garden, Vineyard, Tobacco Fields, etc. Machine weighs about six pounds.

Furnished with three 16 inch tubes, five nozzles and strap. Weight, cased, about 15 lbs. Capacity about one quart. For low growing crops only.

Smaller than the Champion, but also a very good machine, especially when Paris Green and like powders are to be applied.

Price.....\$12.00

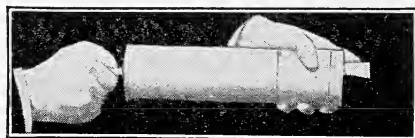


FEENY MODEL B DUSTER

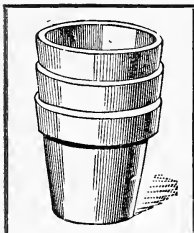
The Model B Duster is ideal for applying all kinds of powdered Insecticides and Fungicides to Trees, Plants, Vegetables, etc., for the control of all insects and fungus pests; for use in the flower garden and in greenhouses. May also be used to control vermin on poultry and in poultry houses and to apply all other powdered materials for various uses, such as to kill flies, roaches, etc.

In using the Model B Duster it is essential that the powder be dry, fine and free from lumps, in order to insure perfect success. For any and all of the above uses the Model B Duster is indispensable. Price.....\$1.25

All Prices Subject to Market Changes.



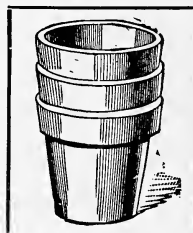
Feeny Duster



Flower Pots and Saucers

Our Flower Pots and Saucers are standard make, of extra fine finish, and bear shipping well.

No Charge for Packing.



Flower Pots

Size	Each	Dozen	Per 100
2 inch.....	\$0.03	\$0.30	\$2.00
2½ ".....	.03	.35	2.50
3 ".....	.04	.40	2.75
3½ ".....	.05	.45	3.25
4 ".....	.06	.50	4.00
5 ".....	.08	.75	6.00
6 ".....	.12	1.20	9.00
7 ".....	.18	1.75	14.00
8 ".....	.25	2.75	20.00
10 ".....	.60	6.50	
12 ".....	1.00	11.00	
14 ".....	1.75		

Flower Pot Saucers

Size	Each	Dozen	Per 100
4 inch.....	\$0.04	\$0.35	\$2.50
5 ".....	.05	.50	3.50
6 ".....	.06	.60	4.50
7 ".....	.10	1.00	7.00
8 ".....	.12	1.20	
10 ".....	.20	2.00	
12 ".....	.25	2.75	

Azalea Flower Pots

These are the same style as our standard Flower Pots, but not so deep. Suitable for Azaleas, Bulbs, Ferns, Spireas, etc.

Size	Each	Dozen
5 inch.....	\$0.08	\$0.75
6 ".....	.12	1.20
7 ".....	.18	1.75
8 ".....	.25	2.75
10 ".....	.60	6.00
12 ".....	1.00	11.00

Round Seed Pans

These are the same style as our standard Pots, but not so deep, and are suitable for Cacti, Begonias, Tulips, etc.

Size	Each	Dozen
5 inch.....	\$0.08	\$0.75
6 ".....	.12	1.20
7 ".....	.18	1.75
8 ".....	.25	2.75
10 ".....	.60	6.00
12 ".....	1.00	11.00



Neponset Waterproof Paper Flower Pots

Lower In Cost Than Earthen Pots and Unbreakable

For over twenty years florists, nurserymen and market gardeners have used the NEPONSET Flower Pot with entire satisfaction. The pot eliminates the troubles and loss caused to shippers of plants and nursery stock in clay pots.

For transplanting and shipping potted plants, and for rooting or shipping Strawberry, Tomato and Cabbage plants, NEPONSET Waterproof Paper Pots are almost ideal.

Size	Dozen	Per 100	Per 1000
2¼ inch.....	\$0.10	\$0.50	\$4.00
2½ ".....	.10	.60	4.50
3 ".....	.15	.75	6.50
3½ ".....	.20	1.00	8.00

McCullough's Plant Tubs

An excellent tub, neat and durable. Made from ¾-inch Cypress, with iron handles and feet, 3 iron hoops and 2 coats of green paint.

No.	Each	Dozen
No. 7—12 inches diameter, 11 inches high.....	\$2.00	
No. 8—13 " " " ".....	2.25	
No. 9—14 " " " ".....	2.50	
No. 10—15 " " " ".....	2.75	
No. 11—16 " " " ".....	3.00	
No. 12—17 " " " ".....	3.25	
No. 13—18 " " " ".....	3.75	
No. 14—19 " " " ".....	4.25	

Cedar Plant Tubs

Made of seasoned selected Virginia White Cedar, bound with steel hoops. Painted green, inside and out, and top edge finished with round bevel.

No.	Each	Dozen
No. 7—12 inches diameter, 11 inches high.....	\$1.50	
No. 8—13 " " " ".....	1.75	
No. 9—14 " " " ".....	2.00	
No. 10—15 " " " ".....	2.25	
No. 11—16 " " " ".....	2.50	
No. 12—17 " " " ".....	2.75	
No. 13—18 " " " ".....	3.25	
No. 14—19 " " " ".....	3.75	

Horticultural Tools and Sundries

CANES. Six to nine feet long, for plant stakes, per 100... **\$2.00**

CANES. Four to six feet long, per 100... **\$1.75**

CANES. Japanese, green dyed, 3 feet long, per 100... **\$1.50**

DIBBLE. Iron, with wood handle. For transplanting plants.
Price... **60c**

EDGING KNIFE. For cutting edges of walks and beds.
Price... **\$1.00**

FORKS, DIGGING OR SPADING... **\$1.50 to \$1.75**

FRUIT PICKER. Made of galvanized steel wire; attaches to pole of any length. Price, without pole... **75c**

GLASS CUTTER, CRESCENT. The best cheap cutter on the market. For all around usefulness we prefer it to a diamond. **20c** each; per dozen... **\$2.00**

GLAZING POINTS, PEERLESS. Will stop your glass from sliding. Made of galvanized steel wire. No rights or lefts. Can be used on either side.



No. 1. For small single-thick glass. Per 1,000... **75c**

No. 2. For large single-thick glass. Per 1,000... **75c**

No. 2 1/2. For double-thick glass. Per 1,000... **75c**

GLAZING POINTS, ZINC CITY. Are positively the best; last forever; a sure preventive of glass slipping. Effective on large or small glass; easy to drive, easy to extract.
Per lb... **60c**



KNIVES, PRUNING... **\$1.25 to \$2.00**

KNIVES, BUDDING... **1.00 to 3.50**

KNIVES, ASPARAGUS. American... **40c**

LABELS, WOOD. For pots, painted:

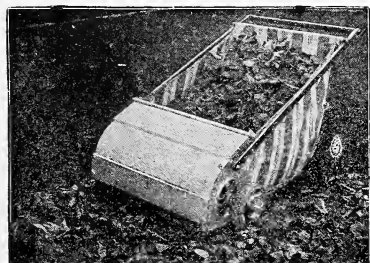
	Per 100	Per 1,000
4 x 3/8-inch.....	\$0.25	\$2.00
5 x 3/8-inch.....	.30	2.50
6 x 3/8-inch.....	.35	2.75
8 x 3/8-inch.....	.85	7.50
10 x 3/8-inch.....	1.00	9.00
12 x 3/8-inch.....	1.25	11.50

LABELS. Tree, notched, copper wired;
35c per 100; per 1,000... **\$2.75**

LABELS. Tree, copper; No. 1, per 100... **\$1.50**
No. 2, per 100... **\$2.00**

LAMP, DEFIANCE FUMIGATING. (For use in greenhouses.) It burns kerosene. It is made of heavy tin throughout. The oil fount is drawn in one piece so it cannot leak. The cup that holds the Nico-Fume (or similar preparation), is also drawn in one piece and cannot leak. No glass about the lamp to be broken. Used by prominent Market Gardeners all over the country. **65c** each; per dozen... **\$6.50**

Pennsylvania Lawn Cleaner



This machine will clean your lawn more thoroughly and quicker than three or four men can do it with hand rakes, and greatly benefit the turf—it leaves the grass standing up straight and straightens up up crab grass and other running weeds so they will

be cut close by the lawn mower and sooner destroyed. In the autumn it takes up the heaviest fall of leaves. It is made of metal, wood and canvas, and is put together in the most durable and thorough manner. It combines strength and durability with light construction. Price... **\$35.00**

We can now supply a brush attachment for the purpose of sweeping worm casts on Putting Greens. This attachment can be readily attached to the cleaner, in place of the rakes now supplied, at an additional cost of... **\$8.00**

MASTICA. For glazing greenhouses. The use of Mastica avoids the necessity of repeatedly reglazing the house, saving much time and expense. One gallon will cover about 300 running feet (one side). One gallon... **\$2.75**

MASTICA GLAZING MACHINE... **\$2.75**

MATCH PLANT STICKS, painted green. 12-inch, **30c**, per 100; **\$2.50**, per 1,000. 18-inch, **40c**, per 100; **\$3.00**, per 1,000.

MATS, HOTBED—Strong Burlap. Indestructible, cheap and warm. These are made of strong burlap, warmly lined with waste wool and cotton, which is quilted to hold in position. Warmer than straw, and more easily handled. Do not retain moisture, freeze, rot, mildew, or harbor vermin, as straw does. 76 x 76 in. Price... **\$3.00**

MATTOCK, LONG CUTTER. With handle... **\$2.00**

MATTOCK, CRONK'S GARDEN... **\$1.00**

POST HOLE DIGGER. Hercules... **\$2.50**

PLANT BED CLOTH. A cheap substitute for glass, answering many uses equally well. Light and easily shipped; made of stout, tarred muslin that sheds water, protects against weather, etc.

Medium grade, per yard... **25c**

Heavy grade, per yard... **30c**

Write for special prices on large lots.

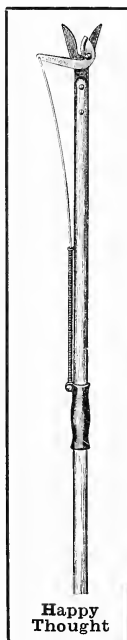
PRUNING KNIVES, Tree

Kansas Improved. Will cut any green limb from the very smallest to one that is one and one-quarter inches in diameter. Any length handle can be used, giving the great advantage of standing on the ground to do the work. 6 feet.
Price... **\$3.00**

Happy Thought. Will cut a limb three-quarters of an inch in diameter. 6 ft. Price... **\$2.00**

Detroit. Will cut a limb one inch in diameter, doing the work easily because of the great leverage and the drawing cut. 6 ft. Price... **\$2.00**

Pruning Shears. Clyde lopping shears; 24-inch handles... **\$3.00**



Happy Thought



PRUNING SHEARS, HAND

California Pattern, 9-inch... **\$1.00**
Wiss heavy, extra fine quality, 9-inch... **3.50**
Wiss, Shear Steel, 9-inch... **1.25**
Ladies' Hand... **1.50**

PUTTY, TWEMLOW'S LIQUID GLAZING. For bedding glass in sash or for filling cracks or seams in roof joints or frames of greenhouses or hotbeds. It is applied with machine, bulb or brush. One gallon will cover about 600 running feet (one side). Gallon... **\$2.75**

PUTTY, BLACK, PEERLESS GLAZING CEMENT. For glazing greenhouses. Durable and inexpensive. Apply with machine. Gallon, **\$1.75**; 5 gal. kit, **\$3.00**.

PUTTY BULB. A useful tool for applying liquid putty when glazing greenhouses... **\$1.35**

RAFFIA, NATURAL. The best tying material for plants, also used for making hats, baskets, etc. Per lb., **50c**; 5 lbs., **\$2.00**.



RAFFIA, COLORED. For making baskets and fancy work in following colors. Black, Blue, Brown, Green, Orange, Pink, Red and Yellow. 1 oz., **15c**; 1 lb., **\$1.25**.

SAWS, PRUNING. 16-inch, **\$1.00**; 18-inch... **\$1.25**

SAWS, PRUNING, DISSTON SWIVEL. Swiveled in steel frame to cut in any position... **\$2.25**

Continued on next page.

HORTICULTURAL TOOLS AND SUNDRIES—Continued

SASH, HOTBED. UNGLAZED. Made from strictly clear cypress lumber. White lead used on the tenons, and iron dowel pins at the corners.

No. 1. 3 x 6 ft., three rows, 10-inch glass. Each.....\$3.75
 No. 2. 4 x 6 ft., five rows, 8-inch glass. Each..... 4.50



SEED SOWER, LITTLE GIANT.
 For sowing wheat, oats, rye, flax, grass seed, clover seed, etc.; in fact any kind of seed, broadcast. They will save their cost almost daily in saving of seed, to say nothing about saving of time and more even distribution, which will have a great effect on the crop. It weighs but three pounds. Price.....\$2.00

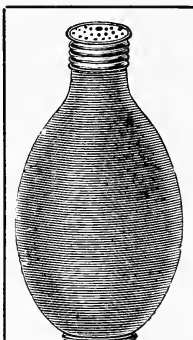
SHOVELS, STEEL. Square point.....\$1.75
SHOVELS, STEEL. Round point..... 1.75
SHOVELS, STEEL. Long handle, square point..... 1.75
SHOVELS, STEEL. Long handle, round point..... 1.75
SPADES. Steel polished..... 1.75
SPADES. Ames steel..... 2.50
SPADES, NURSERY. Steel, extra heavy strapped..... 3.00



SPRINKLER, RUBBER, SCOLLAY'S. Indispensable for floral work and window gardening. Large size.....\$1.35

THISTLE OR DOCK CUTTERS. Narrow blade, with handle for removing thistles or weeds from lawns, with foot rest.....\$1.00

THERMOMETERS, JAPANNED. Tin case. Special Grade.
 8-inch, 35c; 10-inch, 50c.



Medium Grade.....8-inch, 60c; 10-inch, 75c
 Dairy. 10-inch glass..... 50c
 Hotbed or Mushroom.....\$2.50
 Incubator. Prairie State..... 1.00
 Incubator. Buckeye..... 1.00
 Brooder. Prairie State..... 1.00

STUCCO BIRD HOUSES

THE birds which nest and harbor in cavities and hollows are in most instances the most valuable of our native birds, which love the vicinity of man, seemingly not only to delight him with chirp and song, but are the most diligent to keep plant life free from parasites and devouring insects.

Our model hutlets and cabins which we provide for these charming entertainers are appreciated by all bird lovers.



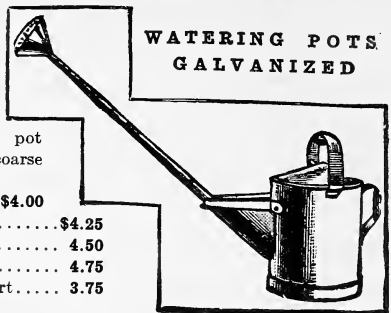
Titmouse Hut

PRICE LIST OF HUTS AND CABINS

Wren Hutlet, each.....\$2.50	Bluebird Hut, each....\$2.75
Titmouse, each..... 2.50	Chickadee Hutlet, ea.. 2.50
Woodpecker and Flicker Hut, each..... 2.75	
Martin Houses.....\$5.00 to \$50.00	
Feederies, Small..... 2.50 to 5.00	
Squirrel Cabins, each..... 8.00	

Long Spout.
 Made from best quality of iron, and heavily galvanized. Two roses with each pot for fine and coarse watering.

6-quart.....\$4.00
 8-quart.....\$4.25
 10-quart..... 4.50
 12-quart..... 4.75
 Ladies' size, 4-quart..... 3.75

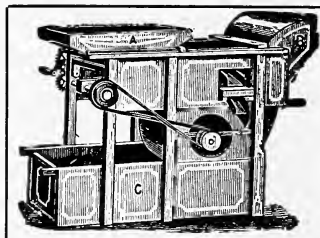


WAX, GRAFTING.

1/4-lb.....15c
 1/2-lb..... 25c
 1 lb..... 40c

WIRE FOLDING PLANT STANDS. The most compact, strong, durable Plant Stands. They pack closer than any other plant stand for shipment. The ends are made of flat steel and have porcelain castors. Can be opened or folded in a few seconds time by simply spreading the stand apart at the bottom, and dropping the cross bars into their places. The construction of the shelves or trays is such that there is more room for the pots and foliage than on any other plant stand that takes the same amount of room on the floor.

3 Tray Wire Stand—Trays 7 1/2 inches wide x 30 inches long....\$5.00
 2 " " " 7 1/2 " " x 30 " " 4.00
 1 " " " 10 " " x 33 " " 2.75



Clipper Seed and Grain Mills

These mills are especially adapted for cleaning grain, Clover and Timothy Seed, as the No. 1 B and No. 2 B are equipped with sieves for cleaning Seeds and Grains for Farmers' use.

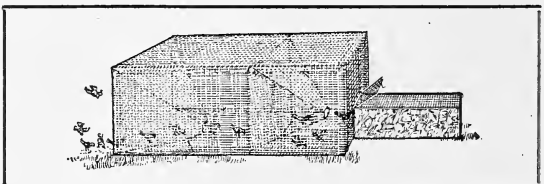
Descriptive circulars and prices for Hand and Power Mills sent on application.

SUET BASKET

WINTER and summer you'll find a happy family of wild birds around you, provided you feed them. Our Suet Basket has a metal back, curved to fit a tree trunk to protect the tree from injury.

The stuffing of the basket portion is the work of an instant, Suet or beef trimmings is the best packing. In spring you can fill a part with hair, twine, feathers and cotton (nesting materials). Place the basket on the shady side in summer, and the sunny side in winter. Weight, 2 lbs. Price, \$1.25, each; postage extra.

The Dodson Improved Sparrow Trap



The Dodson Sparrow Trap is made of tinned wire, electrically welded, strong and durable—will last for years. It has sharp, adjustable needle points projecting from the mouth of each of the two funnels, which effectively prevent any sparrows from getting out of either the front or second enclosure. Size 36 x 18 x 12 inches. Price, complete with receiving box.....\$8.00

Poultry Appliances and Supplies

NEWTOWN LITTLE GIANT INCUBATORS

THE 600-Egg "Newtown" *Little Giant* Incubator is a standard section of four 150-egg Compartments fitted with manifold ends and equipped with all details of the Giant sizes.

The only feature in which this machine differs from Giant Incubators is its operation with a blue-flame oil-burning, instead of a coal-burning Heater. It is the only incubator of its size built with large machine features and all the details of construction and principles of Incubation embodied in "Newtown" Giant Incubators, applies to this machine.

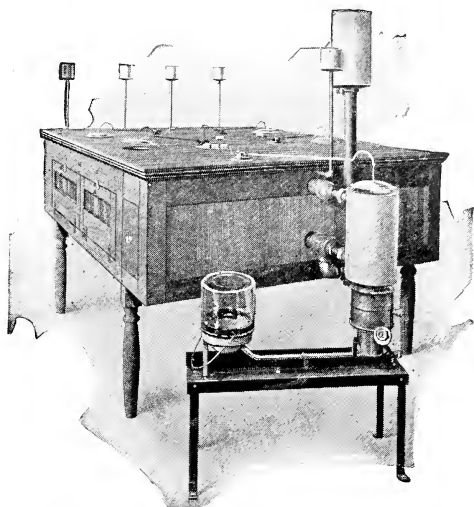
It can be transformed into a 1200-Egg *Little Giant* Incubator by adding one Section. These are ideal hatchers for Poultrymen who do not have specially constructed incubator rooms because they are successfully operated in any warm room or basement. No chimney is necessary. Ready for work wherever placed.

Copper Coil Heater

The Heater used on our 600 and 1200-egg *Little Giant* Incubators is a copper coil Heater manufactured especially for these machines, and so constructed to give greatest heating efficiency from a minimum amount of oil. Oil flow to the burner is automatically controlled. The temperature, as on our Giant Incubators, is controlled by Regulators at the Heater and on each 150-egg Compartment.

NEWTOWN LITTLE GIANT INCUBATOR, 600-Egg Capacity \$145.00. 1200-Egg Capacity, \$235.00; f. o. b. Factory.

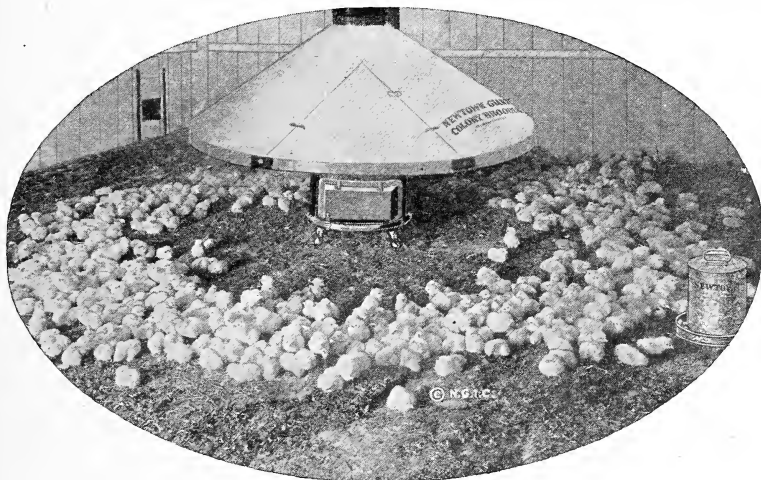
Prices on Newtown Giant Incubators (Coal Burning), a matter of correspondence.



600-Egg "Newtown" "Little Giant" Incubator with blue-flame oil burner.

NEWTOWN GIANT COLONY BROODERS

"NEWTOWN" Colony Brooders were the first coal-burning, self-feeding, self-regulating colony brooders made. They have proven satisfactory in every State and abroad. Made in four sizes to meet general requirements. The size of the Heater determines the fitness of the Brooder for the building. A Brooder with a small heater cannot successfully supply the required heat for a large number of Chicks. "Newtown" Colony Brooders very quickly more than pay for themselves. The magazine holds sufficient fuel to last from 24 to 36 hours. This is very necessary because a brooder must hold fire all the time, night and day, in all kinds of weather. All "Newtown" Colony Brooder Heaters are made with plenty of room for ashes, so that the grates and drafts will not become clogged. The firebowl is specially designed and ventilated. The bottom is serrated so that a layer of ashes three inches thick cannot check or smother the fire.



"Newtown" Colony Brooder Mothering the Chicks

Note the wide circle formed by the Chicks—just where the heat is distributed by the "Newtown" specially constructed Heat Radiator and cone-shaped Deflector. There is no crowding of Chicks around the "Newtown" and they get the temperature best suited to their individual needs by moving toward or away from the stove. It is unnecessary to raise or swing this conical Deflector around when attending the Brooder and the Chicks are never disturbed.

The Newtown Oil Burning Colony Brooder No. 44

ONE of the big faults of oil burning brooders has been their inability to produce and properly distribute over a large floor space sufficient quantity of heat to make possible the successful brooding of large flocks of chicks in cold weather. This is overcome in the Newtown Oil Burning Colony Brooder, because its construction is simplicity itself. The burner is simple and can be lighted with an ordinary match. No smoke or fumes. No flaring up, no going out, nothing to get out of order. If you want an oil brooder this will please you and we sell it to you with the full assurance that it will do everything you have a reasonable right to expect.

It will care for any number of chicks up to 500, but we do not recommend more than 300 to 350. We believe that is enough to put under any brooder—you will raise more and better chicks in the end.

Each brooder is shipped with everything complete in one crate, ready to operate. A thermometer and full instructions for operation are furnished with each brooder. Price.....\$27.50

Send for descriptive Catalogue of the Newtown line.

Prices on all Poultry Feeds and Appliances subject to change without notice.

PRAIRIE STATE SAND TRAY INCUBATORS

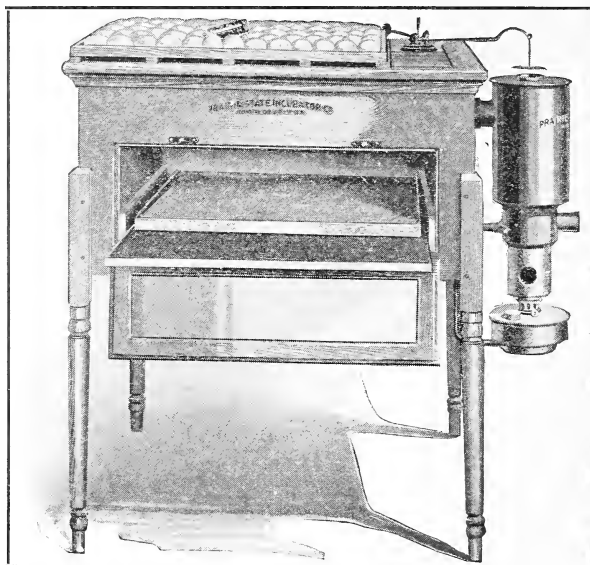
If you are in search of the best Hot Air Incubator manufactured, the one that will hatch the largest number of strong, vigorous chicks, the Prairie State is the machine to buy. **Send for Descriptive Catalog.**

THE Prairie State Incubators are built in four sizes, ranging from 100 to 390 eggs. All Prairie States are equipped with Sand Trays, Egg Trays, Nursery Mats, Thermometers, Egg Testers, Lamps and everything complete ready to operate.

PRICE LIST OF PRAIRIE STATE Sand Tray Diffusion Incubators

Standard No. 0, 100 hen eggs; 135 lbs. crated.....	\$30.00
Standard No. 1, 150 hen eggs; 160 lbs. crated.....	37.50
Standard No. 2, 240 hen eggs; 240 lbs. crated.....	52.50
Standard No. 3, 390 hen eggs; 325 lbs. crated.....	67.50

Egg capacity considered, the Prairie State Incubators are now the lowest priced high-grade machines on the market.



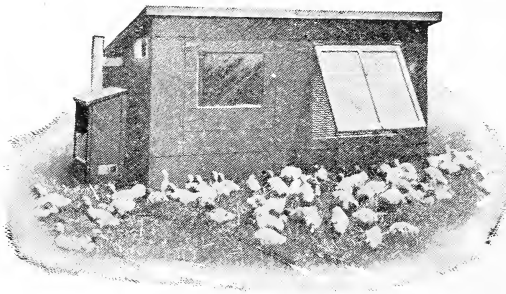
Prairie State Junior Portable Hover

THIS hover is galvanized sheet steel throughout, and in size, substantial construction, chick capacity and economy of operation it is the equal of any lamp brooder on the market. Diameter of top, 23 inches. Capacity, 50 to 100 chicks. Price..... \$10.00

The Home Hover

Built on the same general lines and same construction as the Junior Portable Hover. Diameter of top, 18 inches. Capacity, 25 to 50 chicks. Price....\$6.00

Prairie State Combination Colony Brooder

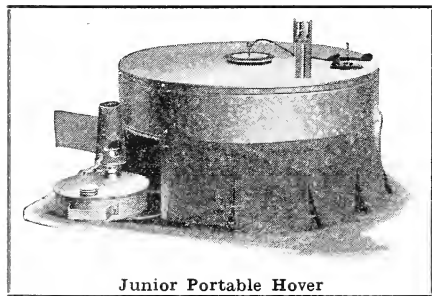


Combination Colony House Brooder. (Outdoor.) Size 2½ feet wide, 5 feet long, divided by a movable partition into two compartments. Weight, crated, 208 lbs. Price..... \$35.00

BUCKEYE INCUBATORS

We offer these incubators as the best Hot Water Incubators on the market. These Incubators are built in several sizes to meet all requirements both in size and price. **Send for Descriptive Catalogue.**

No. 14. (Style E).	Capacity, 65 eggs.....	\$16.50
No. 16. (Style E).	Capacity, 110 eggs.....	27.50
No. 17. (Style E).	Capacity, 210 eggs.....	36.75
No. 1. (Standard).	Capacity, 110 hen eggs, or 85 duck eggs.....	37.50
No. 2. (Standard).	Capacity, 175 hen eggs, or 140 duck eggs.....	44.50
No. 3. (Standard).	Capacity, 250 hen eggs, or 200 duck eggs.....	57.75
No. 4. (Standard).	Capacity, 350 hen eggs, or 280 duck eggs.....	68.00
No. 5. (Mammoth Standard).	Capacity, 600 hen eggs, or 480 duck eggs.....	107.00
Buckeye Incubator Thermometer.....		1.00
Wire Holder for Thermometer.....		.15

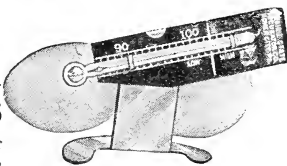


Junior Portable Hover

Prairie State Incubator and Brooder Thermometers

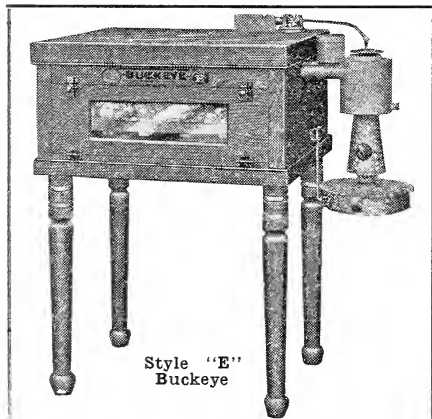
No. 5. Incubator Thermometer Incline, with holder, each, postpaid.....\$1.00

No. 6. Brooder Thermometer for Prairie State Brooders, each, postpaid.....\$1.00



No. 5

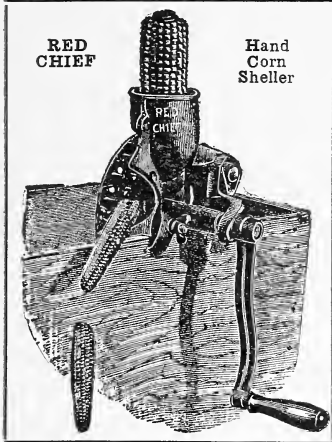
Lack of space prevents us giving detailed information concerning the **Prairie State and Sand Tray Incubators, Brooders and Universal Hovers**, but will be pleased to send descriptive catalogue of these goods on request.



Style "E"
Buckeye

"RED CHIEF" Rapid Grinding Feed and Grist Mills

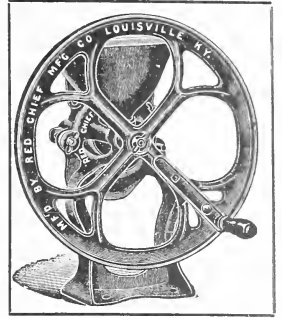
- No. 1—Just the mill for small poultry raisers. Clamps or bolts to box as desired. Has hooks on which to hang a bucket. Capacity $\frac{3}{4}$ to 1 bushel per hour. Price..... **\$3.60**
- No. 2—This is the best **\$5.00** Mill made for grinding all kinds of grain. The feed can be regulated for very fine grinding. Clamps or bolts to box as desired. Has hooks on which to hang a bucket. Capacity 1 to $1\frac{1}{2}$ bushels per hour. Price..... **\$5.00**
- No. 5—This Mill also clamps or bolts to box and has hooks on which to hang a bucket. It is also equipped with fly wheel instead of crank which makes it run steady with least possible power. Capacity 2 to 4 bushels per hour. Price..... **\$7.00**
- No. 10—Mounted on stand (See cut). This will grind Coffee, Spices, Chicken Feed, cracks Peas, etc. Capacity 2 to 4 bushels per hour. Price..... **\$8.50**



- No. 12—Mounted on stand. We consider this the finest hand mill made. Steel axles, bronze boxes and a heavy fly wheel. Capacity 3 to 4 bushels per hour. Price, **\$14.50**

- No. 15—For engine three-quarters horse-power or over. It has bronze boxes, steel axles, in fact all of the good features of the No. 20, except that it has no loose pulley and the capacity is not so great. It can be run with a crank when engine is not running. Capacity 5 to 8 bushels per hour. Price..... **\$14.50**

- No. 20—For grinding Corn Meal, Graham Flour, Stock Feed, etc. With a speed of 300 to 450 revolutions per minute, will grind 10 to 20 bushels of feed per hour. Power required $1\frac{1}{2}$ to 2 horse-power engine. Patent tension for regulating size of ground material, making change of burrs unnecessary. Tight and loose pulley, 10 inches in diameter, $2\frac{3}{4}$ inch face. Reversible belt shift. Feed Regulator. All bearings, bronze bearing metal. Weight crated, 100 lbs. Price..... **\$20.00**
- Stand, extra..... **\$3.60** Separator, extra..... **\$6.30**



"RED CHIEF" Hand Corn Sheller

Only sheller safe to use for shelling seed corn. Shells clean, taking off less chaff than any other sheller. Throws the cobs outside every time. Clamps on barrel or tub as well as on box. Malleable Iron Crank screws on. Requires no wrench. Tension directly on cob, not on hopper, which makes sheller run easy, no force being required to expand the hopper. Price..... **\$2.50**

Pop Corn Attachment, for shelling Pop Corn, **40c** extra.

MANN'S GREEN BONE CUTTERS

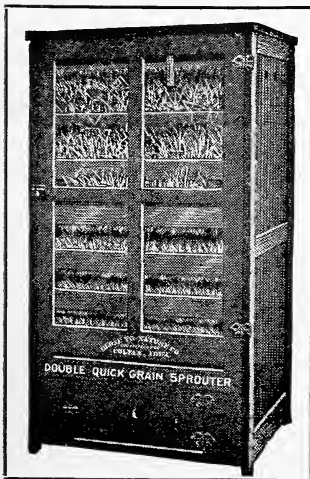
THE poultry raiser wants eggs, and wants them when eggs are worth the most. Green Bone and raw meat produce them. The hen will do her part if you give her a chance. The Mann's Bone Cutter gives you a better chance than does any other Bone Cutter.

- No. 5-C. For flocks of 25 to 50 hens. Weight, 35 lbs. Price..... **\$12.50**
- No. 5-B. For flocks of 25 to 50 hens. Weight, 60 lbs. Price..... **15.50**
- No. 5-B. M. For flocks of 25 to 50 hens. Weight, 85 lbs. Price..... **18.75**
- The No. 5-C, No. 5-B, and No. 5-B. M., do not have the split hinged cylinder.

- No. 7. For flocks of 75 to 150 hens. Weight, 107 lbs. Price..... **20.75**
- No. 7 $\frac{1}{2}$. Capacity, 50 to 100 lbs. per hour. Weight, 150 lbs. Price..... **29.00**
- No. 9. For flocks of 200 to 300 hens. Weight, 170 lbs. Price..... **31.00**
- No. 11. Capacity, 100 lbs. and upwards per hour. Weight, 215 lbs. Price..... **45.00**
- No. 12. Capacity, 150 lbs. per hour. Weight, 260 lbs. Price..... **65.00**

Every Hand-Power Mann Bone Cutter is warranted by us against breakage for one year, and we hereby agree to replace, free of charge, any breakage which occurs while cutting bone within one year from date of purchase, provided purchaser pays express charges on broken part. This insures the purchaser a first-class article.

Send for Free Descriptive Catalog.



DOUBLE QUICK GRAIN SPROUTERS

THE Perpetual Poultry Silo that grows Green Feed while you wait.

Sprouts in 20 to 30 hours and forces growths of an inch to two a day. Makes 2 to 6 bushels of green feed from one of

dry grain. Many thousands of the Double Quick now in every part of the United States and Canada, and is in use in almost every civilized country in the world.

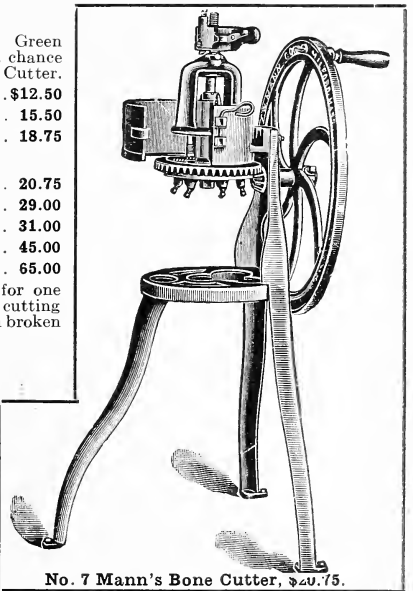
PRICES, CAPACITY, WEIGHT, SIZE

- No. 1. $\frac{1}{4}$ bushel, 2 trays, 25 to 37 hens, 18 x 14 x 23 inches, 25 pounds..... **\$10.00**
- No. 2. $\frac{1}{2}$ bushel, 4 trays, 50 to 75 hens, 18 x 14 x 30 inches, 35 pounds..... **13.00**
- No. 3. 1 bushel, 5 trays, 100 to 150 hens, 21 x 17 x 40 inches, 55 pounds..... **19.00**
- No. 4. 2 bushels, 6 trays, 200 to 300 hens, 25 x 20 x 44 inches, 75 pounds..... **26.00**

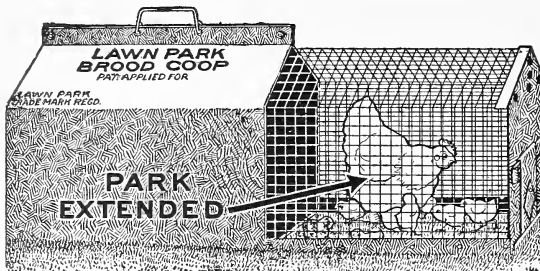
NOTE 1:—Capacities are given in dry grain.

NOTE 2:—Furnished with lamp, thermometer, directions, etc.

NOTE 3:—Largest sizes will pass through ordinary doors.



No. 7 Mann's Bone Cutter, \$20.75.



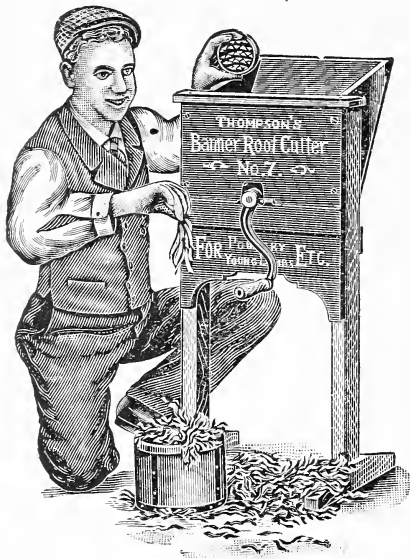
Lawn Park Coop

For successful chicken raising it is necessary to protect the young brood from rats, cats and other pests. The Lawn Park is the most successful coop on the market.

Size, closed, 18 x 24 inches; with park extended, 18 x 48 inches.
Height, 24 inches.....\$5.00

Up-To-Date Square Coop

Made in one size only, 18 x 24 inches and 18 inches high.
Price.....\$3.00



Banner Root Cutter No. 7

It quickly cuts vegetables in long, round, ribbon-like slices, which fowls eat up to the last morsel. It is a valuable addition to the poultry house, and highly recommended by the best poultry experts in the country.

Price.....\$6.50

Moe's Regal Egg Carrier

This "safety first" box is adapted to either Parcel Post or Express use and can be used time after time. We believe it to be the safest and most durable egg carrier on the market.

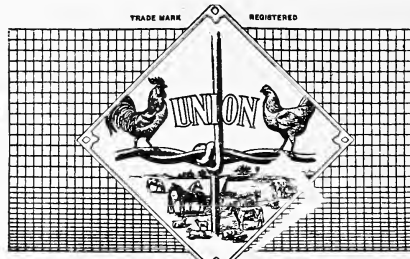
Moe's Regal. No. 14—15 eggs, each, 20c; No. 15—30 eggs, each, 40c; No. 16—50 eggs, each, 70c; No. 17—100 eggs, each, \$1.25; No. 18—12 duck or turkey eggs, each, 25c.

Egg Boxes

Paper Carton. 1 dozen size, per dozen, 20c; per 100, \$1.50.
Continental Safety Carton. 1 dozen size, per dozen, 25c; per 100, \$2.25.

Union Lock Poultry Fencing

All of the cables are the same length, and run the whole length of the fabric, every part can be stretched perfectly. Because of its strength and construction this fence requires



no top or bottom rail and no more posts than the ordinary woven stock fence, or about one-half the number needed in ordinary poultry netting. Union Fence is especially adapted for use where a light, attractive and neat appearing fence is required.

12-inch, bale of 10 rods.....\$2.00
18-inch, bale of 10 rods.....3.00
24-inch, bale of 10 rods.....3.60
36-inch, bale of 10 rods.....\$4.35
48-inch, bale of 10 rods.....5.00
60-inch, bale of 10 rods.....5.50
72-inch, bale of 10 rods, \$6.00

Hexagon Poultry Fencing

Two-Inch Mesh. No. 19 Wire

Per bale, 150 ft. long, 3 ft. wide.....\$4.25
Per bale, 150 ft. long, 4 ft. wide.....5.40
Per bale, 150 ft. long, 5 ft. wide.....7.25
Per bale, 150 ft. long, 6 ft. wide.....8.00

Hexagon Poultry Fencing

One-Inch Mesh. No. 20 Wire

Per bale, 150 ft. long, 1 ft. wide.....\$3.35
Per bale, 150 ft. long, 1½ ft. wide.....4.70
Per bale, 150 ft. long, 2 ft. wide.....6.00
Per bale, 150 ft. long, 3 ft. wide.....8.00

Prices on all Poultry Fencing is Subject to Change Without Notice.

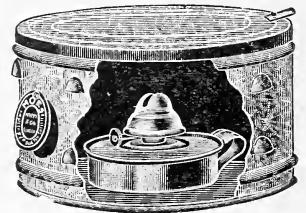
Moe's Fountain Heater

Can be used with all styles of fountains, and effectively prevents water from freezing. Effectively solves the problem of a uniform supply of fresh, clear water at all times, no matter how cold the weather.

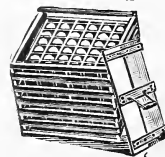
The lamp found or bowl holds sufficient kerosene to burn continuously for seven days. Simple and safe.

Height, 7 in.
Diameter, 11 in.

No. 10. Price each.....\$1.80



Humpty Dumpty Egg Carrier



The Best, Cheapest and Most Convenient Egg Carrier in Existence

The Original Folding Egg Crate has outclassed everything in its line. Made in four sizes.

Prices:
6-doz. size. Each.....\$0.45
9-doz. size. Each......50
12-doz. size. Each......55
30-doz. size. Each.....1.00

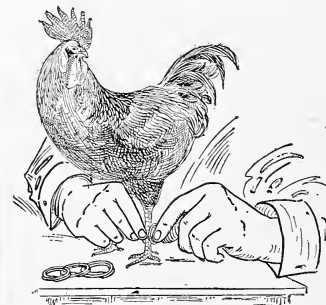
Nest Eggs

Lice Expelling. Each, 10c; 3 for 25c; per dozen, 75c.
Porcelain. 3 for 15c; per dozen, 40c.
Lime. 3 for 15c; per dozen, 40c.

Key Ring Leg Bands

Made of Celluloid in six sizes and ten colors. Black, white, dark blue, pink, light blue, red, garnet, green, yellow, purple. Poultry sizes: 12 Bands 15c; 25 Bands 30c; 50 bands 50c; 100 Bands 75c.

In ordering be sure to specify your breed. Pigeon and Baby Chick sizes: 12 Bands 10c; 25 Bands 20c; 50 Bands 35c; 100 Bands 50c.



Prices on all Poultry Feeds and Appliances subject to change without notice.

Moe's Round Baby Chick Feeder

The most convenient and commodious feeder on the market. Can also be used for water. Manufactured in two sizes.

- No. 11. Small
each.....20c
No. 12. Large
each.....30c



Moe's Single Feeding Trough

For chicks and growing stock. Accurately stamped with dies. No rough edges, and can be hung on the wall. Sliding top.

- No. 55. Length 12 inches, each.....40c
No. 56. Length 18 inches, each.....45c
No. 57. Length 24 inches, each.....60c

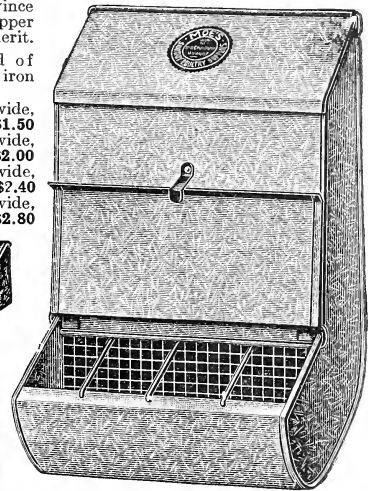
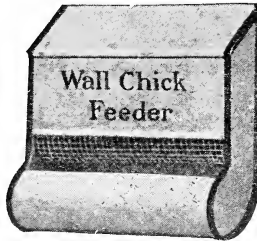


Moe's Double Feeding Trough



Double trough, with sliding top, easily filled and cleaned. Accurately stamped with dies. No rough edges.

- No. 58. Length 12 inches, each.....50c
No. 59. Length 18 inches, each.....65c
No. 60. Length 24 inches, each.....75c



Moe's Dry Mash Hopper

A trial will convince you that it is a Hopper of the greatest merit.

Manufactured of heavy galvanized iron in four sizes.

- No. 35—8½ in. wide,
each.....\$1.50
No. 36—12 in. wide,
each.....\$2.00
No. 13—18 in. wide,
each.....\$2.40
No. 37—24 in. wide,
each.....\$2.80

Wall Chick Feeder

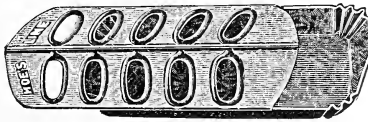
Wire screen keeps chicks from wasting the food. Sloping top prevents roosting. 10-inch, each, 75c; 20-inch, each, \$1.25

Moe's Eclipse Feeding Trough

For chicks and growing stock. No seams, rivets or solder.

Sliding top easy to fill and keep clean.

- No. 27. Length 10 inches, each.....30c
No. 28. Length 20 inches, each.....45c



Aluminum Feeding Trough

Excellent for feeding Buttermilk, as the aluminum is not affected by the acids of sour milk and similar feeds. The same design as shown above, with sliding top. Easy to clean and will never rust.

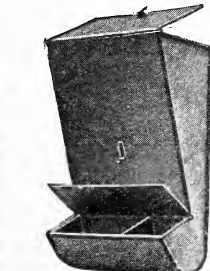
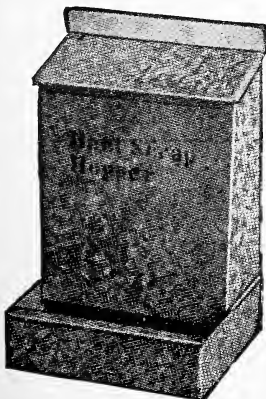
- No. 69. Length 10 inches, each.....55c
No. 70. Length 20 inches, each.....95c

Felker's Wall Feeder

Practical dry mash feeder designed to hang on the wall. No. 12 Feeder. 12 inches long. Each.....\$0.50

Atsatt's Poultry Feeder

A splendid mash feeder, 18 inches long, each.....\$0.50



Round Bottom Dry Food Hopper

Dry mash and beef scrap feed readily and never clog. Price.....75c each; \$7.50 doz.

Prairie State Meat Scrap Hopper

Capacity 10 pounds scrap. Each.....\$0.75

MOE'S NEVER CLOG AND WASTE PROOF HOPPER



Patent Pending

This hopper does away with all trouble of feed clogging, no matter how coarse. Manufactured in 2 sizes.



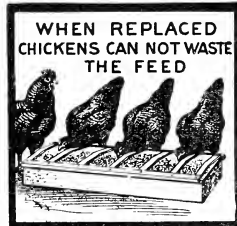
- No. 36. 18-quart capacity, each.....\$1.00
No. 37. 36-quart capacity, each.....1.50

Moe's Feeder and Exerciser

The exercise afforded by using this device keeps your hens in prime laying condition at all times. Manufactured in three sizes:

- No. 52. 8-qt. capacity.....\$1.45
No. 53. 1½ bu. capacity.....2.00
No. 54. 1 bu. capacity.....2.50

Moe's Sanitary Feeding Trough



Can be used for feed, wet mash or water.

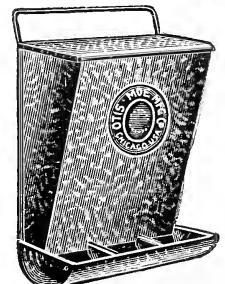
- No. 21. 12 in. long.....\$0.45
No. 22. 18 in. long......65
No. 23. 24 in. long......90

Moe's Grit and Shell Boxes

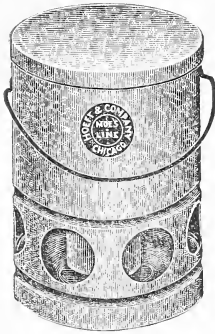
- No. 9. Moe's Grit Box; capacity about ½ bushel.....\$1.00
No. 90. Four compartments 1.35
No. 45. Two compartments .45



Fowls Pecking the Grain as it Operates Spreader



Moe's Pigeon Feeder



Pigeons are fastidious feeders with a tendency to scatter and waste feed. Moe's Pigeon feeder was designed to overcome this. Made of heavy galvanized iron, with feeding holes properly spaced all around the hopper. The hopper has a slanting bottom leading through a large tube to the feeding bottom. This feeding trough or bottom is also made on a slant causing the birds to reach for the food and prevents them from billing the feed out and wasting it. A practical, economical feeder which will soon save its cost.

- No. 105. Capacity 3 qts.
Each\$1.00
No. 106—Capacity 6 qts.
Each\$1.50

Moe's Magazine Chick Feeder and Waterer



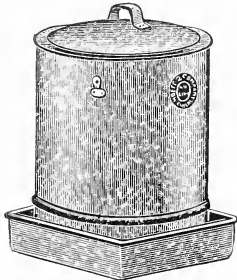
A New round chick feeder with a magazine or container to hold a good quantity of feed. The upper magazine is fitted to the feeder top with a spiral thread so it can be adjusted up or down to feed the various kinds of grain. It can also be used as a drinking fountain, as the magazine is water and air tight. Diameter of feeder 8 1/4 in. Capacity 2 quarts.

- No. 18. Each70c

DRINKING FOUNTAINS FOR POULTRY AND PIGEONS

McCullough's Sanitary Glass Chick Fountain

Best Fountain made for Chicks.
Each 25c.



Moe's Improved Top Fill Fountain

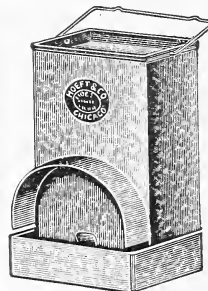
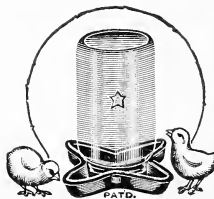
Provides pure, fresh water at all times. The double wall construction retards freezing, and keeps water cool in summer. Fills from the top, easily cleaned, and feeds automatically.

- No. 1. Capacity 1 Gallon, each\$1.75
No. 2. Capacity 2 Gallons, each 2.40
No. 4. Capacity 4 Gallons, each 3.25

Moe's Star Fountain and Feeder

Made of a single piece of heavy metal. No solder, no seams, no loose parts. Suitable for feed as well as water. Little chicks can not drown. Fits any Mason jar in 1 Pint, 1 Quart, and 2 Quart sizes.

- No. 32. (Glass jar not included)..15c

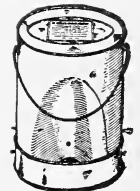


Drop Bottom Fountain

Drop Bottom, easy to fill and to clean. Has wire handle and may be hung on the wall out of the litter and dirt.

- 2-qt. capacity, each\$0.90
1-gal. capacity, each 1.15
2-gal. capacity, each 1.35

Peerless Drinking Fountain



Easy to clean and fill and fowls cannot injure their combs when drinking. Simple in construction, durable and practical.

- 5-quart size, each\$1.00



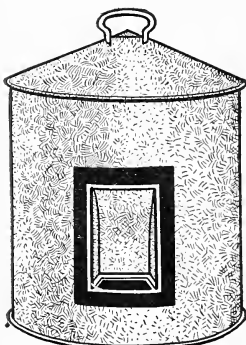
The Duplex Fountain

Top section slides into bottom section.

The latest sanitary fountain on the market. This is a double font, keeps the water clean and pure. Easy to fill. Easy to care for. 8-qt. capacity, each... \$1.50

Bottom Fill Fountain (Cone Shape)

- No. 19. 1-qt. capacity, each 35c
No. 20. 2-qt. capacity, each 45c
No. 24. 1-gal. capacity, each 70c



Royal Thermic Fountain

Royal Thermic Fountain THREE SIZES

SANITARY NON-FREEZING

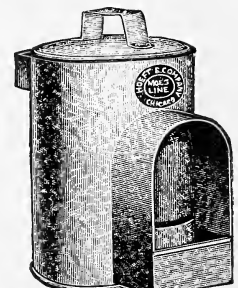
Royal Thermic Fountains are made of the best quality of galvanized iron with double walls and packed with an efficient insulating material; keeps the water warm in winter and cool in summer; insulation is completely around the inside tank. Extra heavy malleable handle, well fastened, for carrying. Special reinforced bottom 3/4-in. off the ground. Extra wide and deep pockets. Inset pocket and cone top, keeps water in drinking pocket clean. Well crated and absolutely guaranteed.

FEATURES OF THE "ROYAL FOUNTAIN"

Special Re-inforced Bottom 3/4-in. off ground. Extra wide 3 1/2-in. inserted drinking pocket. Triple Seam Bottom Roll for strength, no solder. Extra Heavy Malleable handle, fastened securely. Cone Top—Good Workmanship—well crated—Properly Insulated—Absolutely Guaranteed.

- No. 2. 2 gallon, \$3.50 each. No. 3. 3 gallon, \$4.00 each.
No. 5. 5 gallon, \$5.00 each.

Made Only in Three Sizes.



Moe's Improved Wall Fountain

- No. 97. 1/2 gallon\$0.90
No. 98. 1 gallon 1.10
No. 99. 2 gallons 1.40

Poultry Feeds and Supplies

SPECIAL NOTICE

Prices quoted represent market values at time of going to press only.

Market fluctuations prevent us quoting firm prices on Feeds in our Catalogues, but we are always prepared to quote firm prices upon receipt of an estimate of your wants.

None of our Feeds contain grit.

Prices quoted include delivery to Express or Freight depots here, purchaser paying transportation charges. Postage must be added if wanted by mail.

See Parcel Post, second page of cover,

"GLOBE" CHICK MASH, WITH BUTTERMILK. 3 lbs., 25c; 25 lbs., \$1.60; 50 lbs., \$2.80; bag of 100 lbs., \$4.80.

"GLOBE" CHICK GROWING MASH, WITH BUTTERMILK. 3 lbs., 25c; 25 lbs., \$1.60; 50 lbs., \$2.80; bag of 100 lbs., \$4.80.

"GLOBE" CHICK FEED. 4 lbs., 25c; 25 lbs., \$1.30; 50 lbs., \$2.20; bag of 100 lbs., \$3.55.

"GLOBE" DEVELOPING FEED. 4 lbs., 25c; 25 lbs., \$1.25; 50 lbs., \$2.15; bag of 100 lbs., \$3.45.

"GLOBE" SCRATCH FEED. 5 lbs., 25c; 25 lbs., \$1.15; 50 lbs., \$1.90; bag of 100 lbs., \$3.00.

"GLOBE" EGG MASH. 4 lbs., 25c; 25 lbs., \$1.40; 50 lbs., \$2.40; bag of 100 lbs., \$4.00.

WHITE CROSS STOCK FEED. 5 lbs., 25c; 25 lbs., \$1.05; 50 lbs., \$1.70; bag of 100 lbs., \$2.55.

SPRATT'S CHICK MEAL. 2 lbs., 30c; 25 lbs., \$3.40; 50 lbs., \$6.40; bag of 100 lbs., \$12.00.

SPRATT'S POULTRY MEAL. 2 lbs., 30c; 25 lbs., \$3.40; 50 lbs., \$6.40; bag of 100 lbs., \$12.00.

SPRATT'S TURKEY MEAL, GAME MEAL AND PHEASANT MEAL. 2 lbs., 30c; 25 lbs., \$3.40; 50 lbs., \$6.40; bag of 100 lbs., \$12.00.

PINEHEAD OATS. 4 lbs., 25c; 25 lbs., \$1.40; 50 lbs., \$2.35; bag of 100 lbs., \$3.90.

HULLED OATS. 4 lbs., 25c; 25 lbs., \$1.40; 50 lbs., \$2.35; bag of 100 lbs., \$3.90.

SUNFLOWER SEED. 2 lbs., 25c; 25 lbs., \$2.60; 50 lbs., \$4.60; bag of 100 lbs., \$8.75.

ALFALFA MEAL, Fine. 5 lbs., 25c; 25 lbs., \$1.10; 50 lbs., \$1.80; bag of 100 lbs., \$2.70.

ALFALFA MEAL, Coarse. 5 lbs., 25c; 25 lbs., \$1.05; 50 lbs., \$1.70; bag of 100 lbs., \$2.60.

MEAT SCRAPS, 50% Protein. 3 lbs., 25c; 25 lbs., \$1.55; 50 lbs., \$3.15; bag of 100 lbs., \$5.45.

DIGESTER TANKAGE, 60% Protein. 25 lbs., \$1.50; 50 lbs., \$2.55; bag of 100 lbs., \$4.25.

BLOOD MEAL, 80% Protein. 2 lbs., 25c; 25 lbs., \$2.00; 50 lbs., \$3.55; bag of 100 lbs., \$6.30.

GRANULATED BONE. Furnished in three sizes; fine, medium, and coarse. 4 lbs., 25c; 25 lbs., \$1.40; 50 lbs., \$2.40; bag of 100 lbs., \$4.00.

GRANULATED BONE MEAL, for Poultry and Hogs. 4 lbs., 25c; 25 lbs., \$1.40; 50 lbs., \$2.40; bag of 100 lbs., \$4.00.

CHARCOAL. Furnished in four sizes; fine, chick, medium and coarse. 5 lbs., 25c; 25 lbs., \$1.15; 50 lb. bag, \$1.45.

CRUSHED OYSTER SHELLS. Furnished in two sizes; fine for Chicks and Pigeons, coarse for Poultry. 5 lbs., 15c; 25 lbs., 70c; 50 lbs., \$1.00; bag of 100 lbs., \$1.25.

MICA CRYSTAL GRIT. Furnished in three sizes; fine for Chicks, medium for Pigeons, coarse for Poultry. 5 lbs., 15c; 25 lbs., 70c; 50 lbs., \$1.00; bag of 100 lbs., \$1.25.

No charge for bags on any of the above Feeds.

Pigeon Feeds

"GLOBE" PIGEON FEED. No corn—no grit. 3 lb. 25c; 25 lbs., \$1.70; 50 lbs., \$2.95; bag of 100 lbs., \$5.10.

KING PIGEON FEED. Special, with whole flint corn. 3 lbs., 25c; 25 lbs., \$1.55; 50 lbs., \$2.65; bag of 100 lbs., \$4.45.

CANADA PIGEON PEAS. 3 lbs., 30c; 25 lbs., \$2.10; 50 lbs., \$3.75; bag of 100 lbs., \$6.70.

HEMP SEED. 3 lbs., 30c; 25 lbs., \$2.15; 50 lbs., \$3.90; bag of 100 lbs., \$7.00.

PIGEON MILLET. 3 lbs., 25c; 25 lbs., \$1.65; 50 lbs., \$2.90; bag of 100 lbs., \$5.10.

MCCULLOUGH'S HEALTH GRIT. 7 lbs., 25c; 25 lbs., 90c; 50 lbs., \$1.40; bag of 100 lbs., \$2.00.

FOUST'S HEALTH GRIT. 6 lbs., 25c; 25 lbs., \$1.00; 50 lbs., \$1.60; bag of 100 lbs., \$2.35.

ROCK SALT. Small lots; per lb., 5c; 25 lbs., 75c; 50 lbs., \$1.00; bag of 100 lbs., \$1.40.

No charge for bags on any of the above Feeds.

TOBACCO STEMS. Per bale, about 125 lbs., \$2.00.

Miscellaneous Feeds

BARLEY, for Feed. 5 lbs., 25c; 25 lbs., \$1.00; 50 lbs., \$1.55; bag of 100 lbs., \$2.35.

BRAN. 5 lbs., 25c; 25 lbs., 95c; 50 lbs., \$1.45; bag of 100 lbs., \$2.20.

BUCKWHEAT, for feed. 5 lbs., 25c; 25 lbs., \$1.15; 50 lbs., \$1.90; bag of 100 lbs., \$3.10.

CORN MEAL. 5 lbs., 25c; 25 lbs., \$1.00; 50 lbs., \$1.65; bag of 100 lbs., \$2.60.

CRACKED CORN. 5 lbs., 25c; 25 lbs., \$1.00; 50 lbs., \$1.65; bag of 100 lbs., \$2.60.

CORN, SHELLED, Yellow. 6 lbs., 25c; 25 lbs., 90c; 50 lbs., \$1.40; bag of 100 lbs., \$2.10.

KAFFIR CORN, White. 4 lbs., 25c; 25 lbs., \$1.25; 50 lbs., \$2.05; bag of 100 lbs., \$3.35.

MIDDINGS. 5 lbs., 25c; 25 lbs., \$1.00; 50 lbs., \$1.60; bag of 100 lbs., \$2.45.

MILO MAIZE. 4 lbs., 25c; 25 lbs., \$1.30; 50 lbs., \$2.15; bag of 100 lbs., \$3.60.

No charge for bags on any of the above Feeds.

Spratt's Dog and Puppy Cakes

Require no preparation, no trouble, no cooking, and are adapted for all breeds of dogs.

SPRATT'S PATENT DOG CAKES. 2 lbs., 30c; 25 lbs., \$3.15; 50 lbs., \$5.90; 100 lbs., \$11.00.

SPRATT'S PATENT PUPPY CAKES. 2 lbs., 35c; 25 lbs., \$3.40; 50 lbs., \$6.40; 100 lbs., \$12.00.

Pure Seeds for Birds

CANARY SEED, re-cleaned.....Per lb., 15c

RAPE SEED, re-cleaned.....Per lb., 20c

HEMP SEED, re-cleaned.....Per lb., 15c

MIXED BIRD SEED.....Per lb., 20c

SUNFLOWER SEED, re-cleaned.....Per lb., 15c

MILLET SEED, re-cleaned.....Per lb., 10c

LETTUCE SEED, re-cleaned.....Per lb., 20c

CUTTLE BONE.....10c per oz., Per lb., 60c

BIRD GRAVEL.....Package 20c

Pratt's Buttermilk Baby Chick Feed

2½ lb. pkg., 25c; 5½ lb. pkg., 50c; 14 lb. bag, \$1.25; 25 lb. bag, \$2.00; 50 lb. bag, \$3.50; 100 lb. bag, \$6.00.

O. K. Poultry Litter

A DEODORIZER, ABSORBENT, DISINFECTANT, ECONOMICAL AND LABOR SAVING

O. K. POULTRY LITTER is a great Labor Saver and does away with most of the unpleasant work of caring for poultry. Repels vermin and is so light and springy that heavy birds do not injure themselves when alighting on it, thereby preventing bumble foot and lameness. Keeps the birds clean as it prevents the droppings from sticking to them. It is very economical as it outlasts any other Litter two or three times. Prevents dampness and keeps the coops pure and sweet—there will be no unpleasant odors where it is used. Saves the cost of disinfectants. When through using it in the poultry houses, is worth very nearly its cost as a fertilizer. It retains (until used), all the fertilizing properties contained in the droppings and also loosens the soil. It takes an intense heat to even make O. K. Litter smoulder and it will never blaze. Makes use of dropping board unnecessary. One bale will cover about 80 square feet, 3 inches deep. Per bale, \$4.50; per bushel, \$1.25; 5 bale lots, \$4.25 per bale.

Mustard for Poultry

FRENCH'S POULTRY MUSTARD. 1½ lbs., 55c; 3 lbs., \$1.00; 5 lbs., \$1.65; 10 lbs., \$3.25; 25 lbs., \$7.80; 100 lb. drum, \$20.00.

Blatchford's Calf Meal

BLATCHFORD'S CALF MEAL. 25 lbs., \$1.70; 50 lbs., \$3.00; 100 lbs., \$5.25.

Darling's Meat Crisps

DARLING'S MEAT CRISPS. 3 lbs., 35c; 6½ lbs., 70c; 25 lb. pail, \$3.50.

Carbola

A Disinfecting Germ-Killing White Paint.

There is nothing that contributes more to success in poultry raising than absolute cleanliness and sanitation in the poultry house. Clean living quarters mean as much as proper feeding. Trial pkg., 30c; 10 lb. pkg., \$1.25; 50 lb. bag, \$5.25.

McCULLOUGH'S

Catalog of

BULBS

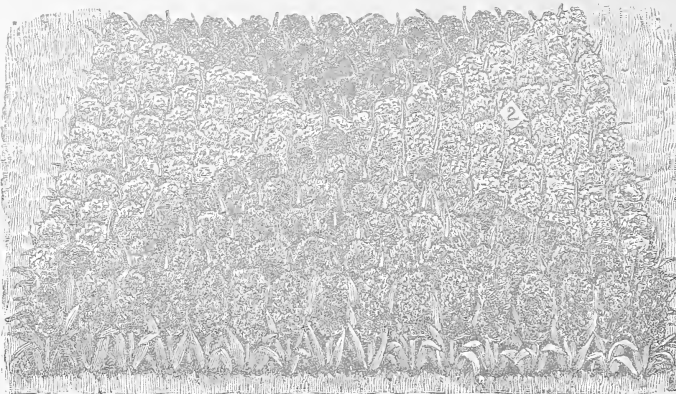
SHRUBS

SEEDS

TREES

PLANTS

ETC.



HEADQUARTERS FOR

Incubators

Bone Cutters

Brooders

Feeders and

Oat Sprouters

Exercisers



ALL THE LEADING

Poultry Appliances and Supplies

THE J. M. McCULLOUGH'S SONS CO.

R. S. McCULLOUGH, Pres't.

Incorporated 1904

GEO. H. PARVIN, Vice-Pres't.

Seedsman and importers of Bulbs

TRADE MARK



Established 1838

Salesrooms and Offices:

316 WALNUT STREET 316
Just Below Fourth

Opposite Walnut Street Entrance Dixie Terminal Building

Warehouse and } 328, 330 and 332 East Front Street
Track Depot: } 323 and 325 Yeatman Street

TRADE MARK



Established 1838

LONG DISTANCE PHONE: MAIN 4598

P. O. BOX 845

CINCINNATI, OHIO